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ABSTRACT

A team of seven faculty members at the University of Tennessee, Knoxville (UTK), provided training in career education for 300 teachers, counselors, and principals from schools throughout Tennessee. Six curriculum modules were developed, which included an introduction to career education and units on utilization of community resources, career education for the handicapped, infusion of career education into academic content, the counselor's role in career education, and the principal's role in career education. Four inservice workshops were conducted, three of which provided academic credit for participants. During the workshops for which credit was awarded, each school-based team developed a local implementation plan. The UTK faculty team provided follow-up assistance which included (1) a monthly newsletter containing infusion ideas; (2) lesson planning ideas and resource materials; (3) inservice programs for participating faculties; and (4) an annotated bibliography of commercial career education materials. Measurement instruments administered prior to and following instruction provided indications that the workshop presentations caused a significant increase in participants' general knowledge of career education concepts and positive attitudes toward career education. A preliminary follow-up of participants who had sufficient time to make use of their training revealed that all had made some use of plans developed during the workshop and that 22% had used their plans extensively. (Author/BM)

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# A College-Wide Team Approach To Providing Career Education Training for School-Based Teams of Principals, Counselors and Teachers

## FINAL REPORT

A Training/Retraining Project
Funded by the U.S. Office of Career Education

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# CAREER EDUCATION PROGRAM
# PROJECT PERFORMANCE REPORT

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3. Final Report

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## REPORT ABSTRACT

During 1978-79 a team of seven faculty members representing five departments within the College of Education at the University of Tennessee, Knoxville (UTK) provided training in career education for 300 teachers, counselors, and principals from schools throughout Tennessee. The UTK faculty team developed six curriculum modules which were integrated in various ways to provide the content for four in-service workshops. The curriculum modules included an introduction to career education, a unit on utilization of community resources in career education programs, career education for the handicapped, infusion of career education into academic content (for teachers), the counselor's role in career education, and the principal's role in career education.

Two of the in-service workshops were held in Knoxville on the University of Tennessee campus; the first began in July 1978 and the second in April 1979. A third workshop was conducted for Memphis City Schools personnel in November 1978, and a fourth was held in Cleveland, Tennessee, in March 1979. Both Knoxville workshops and the one in Cleveland provided tuition-free academic credit for participants.

During the workshops for which credit was awarded, each school-based team developed a local implementation plan which included: a definition of career education; a description of the school setting and rationale for use of career education in that setting; a student needs assessment; school-wide age appropriate career education goals based on student needs; specification of objectives for principal, counselor, and teachers in implementing the school goals; and a plan for evaluating progress toward achievement of the school objectives.

The UTK faculty team provided follow-up assistance for workshop participants which included (1) a monthly newsletter containing infusion ideas for teachers and information about new career education materials, (2) specific lesson planning ideas and other resource materials, (3) in-service programs for faculties at participating schools, and (4) an Annotated Bibliography of Commercial Career Education Materials.

Measurement instruments administered prior to and following instruction provided indications that the presentation of workshop content caused a significant increase in participants' (1) general knowledge of career education concepts, and (2) positive attitudes toward career education. A preliminary follow-up of participants who had had sufficient time to make use of their training revealed that all had made some use of the plans developed during the workshop. Twenty-two percent said they had used their plans "extensively." All indicated that they would make more use of their plans during the 1979-80 academic year.

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## MAJOR PROJECT ACTIVITIES

### Need for the Project

Convincing evidence of the need for career education in Tennessee's public schools was provided by the 1978 student needs assessment conducted during the preparation of Tennessee's State Plan for Career Education. A sample of 366 ninth graders and 379 twelfth graders from schools throughout the State responded to a 35-item questionnaire which was designed by personnel in the State Department of Education and approved by Tennessee's Advisory Council for Career Education. Significant findings included the following:

(1) 41% of the ninth grade respondents and 32% of the twelfth grade respondents said that school had not shown them "the value of employment."

(2) 45% of the ninth graders and 42% of the twelfth graders said that they had not had opportunities in their classrooms to discuss how their abilities and school subjects might be related to educational and career opportunities.

(3) 42% of the ninth graders and 34% of the twelfth graders indicated that their schooling had not shown them how career choice would affect one's standard of living.

(4) 43% of the ninth graders and 35% of the twelfth graders responded negatively to the item, "In your school experience have people been invited to come to your classes to talk about their work and the requirements for their jobs?"

(5) 62% of the ninth graders and 50% of the twelfth graders said they had not been made aware through classroom activities of job opportunities in their community and surrounding areas.

(6) 49% of the ninth graders and 35% of the twelfth graders indicated that their school experience had not provided them with the opportunity "to explore the advantages and disadvantages of several career areas." The same percentages of students at the two grade levels said that their school had not "provided information about employer expectations."

(7) 50% of the ninth graders and 53% of the twelfth graders said "no" when asked, "Has your school helped you become aware of the many constructive or productive ways you may use your leisure time?"

(8) 57% of the ninth graders and 42% of the twelfth graders said that they had not learned skills necessary for choosing among career alternatives.

In 1977 all school superintendents in Tennessee, and samples of principals and teachers, were surveyed to provide input for the State Plan for Career Education. Responses from superintendents indicated that fewer than half (47%) of the systems had attempted to implement a career education program, and that only 20 percent had on-going programs for which special funds had been allocated in system-wide budgets. Ninety percent of the superintendents viewed lack of staff training as one of the chief obstacles to implementation of career education in their schools. Yet in 1976-77 only 15 percent of the State's school systems had conducted staff training in career education. More superintendents (89%) named "in-service staff development" than any other factor as a priority need in promoting further career education implementation in Tennessee (Banta, 1977).

## Project Objectives

### Overall Design of the Project

The State assessment of student needs in career related areas established clearly the need for career education in Tennessee's schools. The survey of superintendents provided data which indicated that in-service training for school professionals should be provided in order to increase the utilization of career education in the schools. In response to these needs a group of seven faculty members in the College of Education at The University of Tennessee, Knoxville (UTK) proposed the present training project.

The faculty team developed a set of process objectives to implement the overall goal of providing a highly visible career education training program in Tennessee which would increase career education activities in the public schools of the State. Those objectives were:

(1) To utilize an interdisciplinary team of UTK College of Education faculty members representing five major departments to plan the curriculum for a multi-discipline career education training program for in-service principals, counselors, and teachers.

(2) To integrate, for the purpose of providing a comprehensive training program, a set of curriculum modules which had been presented sequentially as University courses during 1977-78.

(3) To present a workshop for teams consisting of the principal, a counselor, and two teachers from at least 27 schools in Tennessee.

(4) To assist each school-based team to develop or adapt a plan for implementing career education in its own school.

(5) To provide technical assistance to workshop participants as they attempted to implement their local plans during the 1978-79 school year by means of a newsletter, regular consultant service, and the provision of information about the progress and problems of other teams.

(6) To develop a plan for disseminating (a) information from the workshop and follow-up activities to all public schools and to all teacher preparation institutions in the State, and (b) workshop materials to additional schools which might be interested in using them.

Objective 1

The first objective of the training project was "To utilize an interdisciplinary team of UTK College of Education faculty members representing five major departments to plan the curriculum for a multi-discipline career education training program for in-service principals, counselors, and teachers."

Since June 1976 an interdisciplinary team of faculty members in the College of Education at The University of Tennessee, Knoxville has worked to provide a program of pre- and in-service training in career education for teachers, counselors, and school administrators. In April 1978 this team published a conceptual framework for a team approach to career education in the public schools in a monograph entitled Career Education: A Framework for Teamwork (Banta, et al., 1978). The various chapters outlined the functions of teacher, counselor, and school principal in a comprehensive K-12 career education program.

During 1977-78 the UTK career education team developed and field tested six career education curriculum modules designed to acquaint pre- and in-service teachers, counselors, and principals with their responsibilities in a comprehensive career education program. Titles of these modules with their authors and the author's departmental affiliation are listed below.

(1) "Introduction to Career Education" by Trudy W. Banta, Bureau of Educational Research and Service.

(2) "Infusing Career Education into the School Curriculum" by Thomas N. Turner, Department of Curriculum and Instruction.

(3) "Career Education for the Handicapped" by Lee C. Murphy (now at the National Technical Institute for the Deaf, Rochester, New York) and Jean Schindler, Department of Special Education.

(4) "The Counselor's Role in Career Education" by Siegfried C. Dietz and Mark A. Hector, Department of Educational Psychology and Guidance.

(5) "The Administrator's Role in Career Education" by George W. Harris, Jr., Department of Educational Administration and Supervision.

(6) "Community Resources in Career Education" by Robert R. Hanson, Department of Vocational-Technical Education.

These modules were pilot tested as part of the curriculum of UTK's College of Education. They were offered in three 2-credit-hour units for different audiences: (1) Modules 1 and 6 were combined and offered as an introduction to career education during the 1977 Fall Quarter; (2) Modules 2 and 3 were combined and offered for teachers during the Winter Quarter; (3) Modules 4 and 5 were combined and offered during the Spring Quarter for counselors and principals. Students interested in taking the Winter or Spring courses were encouraged to take the introductory course offered in the Fall.

Brief summaries of the six curriculum modules appear in Appendix A along with learner outcome objectives, instructional strategies, and bibliographies, for each.

## Objective 2

The second process objective was "To integrate, for the purpose of providing a comprehensive training program, a set of curriculum modules which had been presented sequentially as University courses during 1977-78."

For the series of workshops designed to deliver the training component of the present project, the career education curriculum modules developed by the UTK faculty team were integrated in two different ways:

(1) For the first two workshops all participants (teachers, counselors, principals) met together for the presentation of Modules 1 and 6 and then met separately to consider the other modules: i.e., teachers were exposed to Modules 2 and 3, counselors received Module 4, and administrators received Module 5.

(2) For the third and fourth workshops all modules were presented to all participants meeting together. When the total group was divided for small group activities, the working unit was the school-based team--principal, counselor, and two teachers--rather than teachers, counselors, and principals in separate groups.

## Objective 3

The third training project objective was "To present a workshop for teams consisting of the principal, a counselor, and two teachers from at least 27 schools in Tennessee."

When the present project was proposed, the UTK faculty career education team planned to conduct one workshop, in the Summer of 1978, for 108 individuals--a principal, a counselor, and two teachers from 27 schools, three in each of Tennessee's nine development districts. However, by the time the award notice from Washington had been received and the workshop announced via letter to all principals in the State, approximately one-third of Tennessee's schools had been dismissed for summer vacation and the remainder were entering the last week of the school year. Most school professionals had made their plans for the summer and were not interested in attending the workshop. Even an extensive telephone campaign produced only 40 recruits for the workshop held in Knoxville July 24-August 11. Two of the 37 individuals who eventually completed the workshop for academic credit were principals. One was accompanied by a single teacher; the other by the complement of a counselor and two teachers which constituted the career education cadre that workshop planners had hoped to train for every participating school.

In order to achieve the original objective of training a significant number of TEAMS to implement career education in Tennessee, three additional workshops were conducted. The first was a one-day session which carried in-service credit for 104 persons employed in the Memphis City Schools. Approximately 25 school-based teams took part in this workshop, including 11 principals, 18 counselors, and 75 teachers. Training was conducted in the library at Melrose High School from 8:00 a.m. to 3:00 p.m. on Saturday, November 18, 1978.

In November a letter was sent to every principal in East Tennessee describing the team approach to career education and requesting a reply if the principal was interested in sending a team to a tuition-free three-credit-hour workshop. Each principal was encouraged to suggest where and when such a workshop might be held in order to be most convenient for his/her school-based team.

Over the next two months sufficient replies were received from principals to make it evident that two additional workshops should be offered: one in the Chattanooga area and one in the Knoxville area. The decision was made to conduct one workshop in Cleveland, Tennessee, at Cleveland State Community College on five successive Saturdays beginning March 3 and ending March 31, 1979. The second workshop was held on the campus of The University of Tennessee, Knoxville, on Monday and Thursday evenings from 5:00-8:00 p.m., beginning April 2 and ending May 7, 1979.

Format for workshop. As indicated previously, the format for the summer workshop in Knoxville and the one-day workshop in Memphis differed significantly from that utilized in Cleveland and in Knoxville in the Spring. Initially the faculty team believed that while there were certain common understandings about career education that principals, teachers, and counselors could learn together, there were other topics, such as infusion of career education into lesson plans for teachers, that could best be presented to each group meeting separately. During the first two workshops principals, teachers, and counselors met together for learning activities related to the introduction and to the community resources modules. The modules "Infusing Career Education into the School Curriculum" and "Career Education for the Handicapped" were presented only to teachers. Counselors met separately for the module "The Counselor's Role in Career Education," and "The Administrator's Role in Career Education" was presented only to principals.

Participants in the first workshop provided indications in their evaluations that the UTK team had not worked together closely enough in presenting workshop content. Since the faculty group wanted to be perceived as a close-knit team in order to provide an example for the operation of the school-based teams participating in the workshop, alternative workshop formats were considered.

During the Cleveland workshop two or more UTK team members participated in each session. All professors attended the first class meeting to introduce their respective modules. The second Saturday presentations were made to the entire group of workshop participants on the following topics: career education for the handicapped, infusion, and the counselor's role in career education. For the last two hours of that session school-based teams met to refine a definition of career education for their setting and to make plans for conducting needs assessments to determine what their own students needed most with respect to career development and career preparation. Each professor in attendance served as consultant to one or more of these teams as they worked.

At the conclusion of the second class meeting in Cleveland each school-based team selected a member of the UTK team to serve as its permanent consultant. Consultants called their teams at a pre-arranged hour each week to answer questions which had occurred to the team during the week of work between class sessions. These mid-week contacts with the UTK professors helped the school-based teams overcome the feeling of remoteness which participants usually experience when courses are taught off-campus with once-a-week class sessions. The contact also kept the school-based team members from continuing for a whole week in the wrong direction if they had misinterpreted some part of their assignment, which was to develop a plan for implementing career education in their own school.

During the third class session in Cleveland participants heard from three professors about infusion, career education for students with special needs, and the role of the principal in a comprehensive career education program. At the fourth session the history of career education, including relevant legislation, was presented, along with a consideration of ways to involve the community in the school's career education efforts. School-based team meetings with access to professorial consultants constituted significant portions of both these sessions. Three team members attended the last session in Cleveland when post-test and evaluation questionnaires were administered, and school-based teams summarized their plans orally.

No separate sessions for teachers, principals, or counselors were held in connection with the Cleveland workshop. Response to the new format from Cleveland participants was so positive that the same format was utilized in Knoxville during the April-May workshop there.

Knoxville participants heard a number of guest speakers in their joint sessions: the state career education coordinator, a textbook publisher, an employer panel, someone from the State Department of Employment Security, a consultant on sex-role stereotyping and racial bias in career education materials, representatives of two local career education programs, and an evaluation consultant.

As part of the community resources module Knoxville participants visited a number of area employer sites, including:

Rohm & Haas Company (plastics manufacturer),

Dempster Dumpster Systems (manufacturer of large trash containers),

T.A.T. (Training and Technology Project) at Union Carbide in Oak Ridge (training of technicians in a large industrial setting),

Robertshaw (manufacturer of thermostats and other control mechanisms),

and a waste water treatment plant.

Participants in the Cleveland workshop had opportunities to visit:

Combustion Engineering in Chattanooga (manufacturer of nuclear reactors and steam generators),

Bowater's in Cleveland (manufacturer of paper),

and City Service in Copper Hill (copper mining).

Workshop participants. Altogether, 300 individuals from 85 schools in five of Tennessee's nine development districts took part in the four career education workshops conducted between July 1978 and May 1979. The participants included 40 administrators, 35 counselors, and 225 teachers. Table 1 shows the number participating at each workshop site.

Table 1. Number of Schools and Participants at Each of Four Workshop Sites

| | Schools | Participants | Administrators* | Counselors | Teachers |
|---|---|---|---|---|---|
| Knoxville (Summer) | 20 | 40 | 6 | 7 | 27 |
| Memphis | 25 | 104 | 11 | 18 | 75 |
| Cleveland | 15 | 48 | 2 | 3 | 43 |
| Knoxville (Spring) | 25 | 108 | 21 | 7 | 80 |
| | 85 | 300 | 40 | 35 | 225 |

*Principals, assistant principals, and curriculum supervisors

While the number of schools and the number of participants reached in the course of this training project was greater than that specified in the initial proposal, the geographic coverage was not as extensive (schools in five, rather than nine, of the State's development districts were involved) and the participation of principals was disappointing. A principal or assistant principal headed only two of the teams that participated in the Knoxville summer workshop, eleven of the Memphis teams, two of the Cleveland teams, and thirteen of the teams participating in the workshop held in Knoxville in the Spring. While many of the principals who sent teams of teachers to a workshop expressed interest in career education and willingness to support whatever plans their teachers might make to implement it, they explained that they themselves could not attend the workshop for one reason or another.

Objective 4

The fourth objective was "To assist each school-based team to develop or adapt a plan for implementing career education in its own school."

At the first class meeting participants in the three workshops for which academic credit was awarded (both Knoxville workshops and the Cleveland workshop) were given instructions for developing a plan for local implementation of career education. The suggested outline for the plan, the instructor criteria for evaluating the plan, the evaluation guide, and some excerpts from the plans actually developed are included in Appendix B.

Participants were encouraged to work as school-based teams and to develop an integrated group plan for career education in their school incorporating:

(1) a definition of career education which all members of the team could accept;

(2) a description of the school setting and rationale for using career education in that setting;

(3) a student needs assessment (or at least a plan, including a sample instrument for assessing student needs if time did not permit actual administration) employing a representative sample of the school population;

(4) (optional) (a) a faculty needs assessment to determine the extent of teacher interest in helping to implement the career education plan, (b) a parent needs assessment to determine parent interest in career education, (c) a community needs assessment to identify potential resource persons, field trip sites, and opportunities for shadowing or part-time employment for students;

(5) a set of school-wide age appropriate goals for career education based on needs identified in (3) and/or (4) above;

(6) specification of objectives for principal, counselor, and teachers in implementing the school goals. (Each teacher developed lesson plans designed to integrate objectives based on the school's career education goals with subject matter objectives.)

(7) evaluation plans. (Principals and counselors were asked to indicate how they would evaluate the objectives they had set for themselves with regard to the school's career education program. Teachers were asked to specify how the objectives associated with their lesson plans could be evaluated.)

In general, team members worked together on the school definition of career education, the description of the school setting, the rationale for career education, the needs assessments, and the formulation of school goals. Then specific action plans for principals, counselors, and teachers were developed by individuals. Each plan was required to contain evidence that parents and other community resource persons would be involved in the career education effort.

Following the workshop each plan was evaluated by at least two professors from the UTK career education team. An evaluation guide sheet (see Appendix B) was completed by each professor grading a given plan and these sheets, with the reviewers' comments, were returned to the school-based team along with their plan. Most of the plans submitted were excellent: 85 percent were considered "A" papers by the professors; 13 percent were given Bs; and only 2 percent received grades of C or lower.

## Objective 5

The fifth process objective was "To provide technical assistance to workshop participants as they attempted to implement their local plans during the 1978-79 school year by means of a newsletter, regular consultant service, and the provision of information about the progress and problems of other teams."

Planned workshop follow-up. Originally the UTK faculty team had intended to maintain contact with each school-based team by calling the principal or some other team representative each month following the summer workshop. At least one follow-up conference in each of Tennessee's nine development districts was planned to permit the UTK team to provide follow-up assistance to the teams and to encourage communication and cooperation between teams in the same district.

However, approximately three-fourths of the participants in the Knoxville summer workshop were teachers, and fewer than 20 percent of the schools were represented by more than a single faculty member. Only one full team, i.e., principal, counselor, and two teachers, was in attendance. Monthly telephone contact with one teacher in a school seemed more likely to engender frustration and ill will than to provide the assistance intended. Moreover, without the support of additional team members, individual teachers had little hope of putting together a comprehensive program of career education that would involve the principal, counselor, and many of the other teachers. Thus it appeared unlikely that the individuals who participated in the summer workshop would need the kind of follow-up assistance workshop planners had envisioned at the outset.

Consequently, the financial resources that would have been expended for monthly telephone contact and regional follow-up conferences were channeled in a variety of alternative directions:

(1) two follow-up surveys of participants conducted by mail and telephone;

(2) response to participants' requests for (a) specific lesson planning ideas and other resource materials, and (b) in-service programs for their faculties;

(3) three additional career education workshops;

(4) monthly newsletters (see sample in Appendix C) which provided infusion ideas for teachers and information about new career education materials and recent developments in career education at the State and national levels; and

(5) an annotated bibliography of commercial career education materials.

Follow-up surveys. In early October 1978 participants in the Knoxville summer workshop were sent a brief (two-item) questionnaire. The first question asked "To what extent have you made use of the career education plan which you developed in August? _____ Extensively used, _____ Used with modifications, _____ Not used at all. If not used at all, why not?"

Five of the 40 summer workshop participants were unemployed during Fall 1978. Replies were received (by mail and telephone follow-up) from 30 of the remaining 35 participants. Twenty of the 30 said they were using the career education plans they had developed. Extent of usage varied from bringing information about occupations into class discussions (by a high school English teacher) to sensitizing an entire faculty to career education through information presented in faculty meetings, scheduling school assembly programs during which community representatives talked about their occupations, and conducting an extensive field trip program (by the one principal in the summer workshop who was accompanied by a counselor and two teachers).

Reasons given by participants for not using their career education plans included (1) lack of time to do so, (2) change in teaching assignment, and (3) objections to career education on the part of the school principal. The "First Follow-Up Questionnaire" and a summary of the responses received (entitled "Progress Report") are included in Appendix C.

In May 1979 a second, more extensive, assessment instrument was mailed to participants in the Knoxville summer and Cleveland workshops. A copy of the "Second Follow-Up Questionnaire" also appears in Appendix C. Telephone contact with those who did not respond by mail increased the number of respondents to 57 of the 83 participants employed during 1978-79, a return of 66 percent. Responses were received from all the schools represented at the Cleveland workshop and most of the schools represented at the Knoxville summer workshop. Three-fourths of those responding said they were presently using the career education implementation plans they had developed during the workshop they had attended. All respondents said they anticipated making more use of those plans during the 1979-80 school year.

Additional analysis and interpretation of responses to the "Second Follow-Up Questionnaire" are included in the Evaluation section of this report.

Responses to participants' requests for assistance. One of the participants in the summer workshop was a curriculum supervisor in a Memphis high school. She said that career education was being taught as a separate course at her school and that she needed assistance in convincing her principal and faculty that career education should be infused in every course rather than taught separately. The workshop in Memphis was held partially in response to this request. A team from this supervisor's high school did attend that workshop.

A second summer participant asked that two of the UTK faculty team members provide an introduction to career education and to the concept of infusion at a faculty meeting in December. Professors Banta and Turner responded to this request and made the presentation. A "Request for Career Materials" form (see Appendix C) was developed for this audience and distributed to teachers at the faculty meeting. Four teachers later used the form to make a request, and appropriate materials were mailed to those teachers.

Two participants in the Cleveland workshop requested training programs for faculty in their school systems just prior to the opening of school, i.e., in August 1979. Several UTK team members made plans to participate in those programs.

Several participants in each workshop asked for lesson-planning ideas in various subjects. Collections of materials in approximately 15 subject areas, at various grade levels (see matrix in Appendix C) were assembled during May 1979, and copies of these collections were sent to participants upon request.

Additional workshops. The initial award from the Office of Career Education contained funds for tuition and housing for 108 summer workshop participants. When only 40 individuals took part in the summer workshop, and only 11 of those utilized University housing (most lived in the Knoxville area), the decision was made to utilize the remaining funds which had been allocated for housing to reach in-service professionals who had not been able to take advantage of the opportunity to attend the summer workshop. Subsequently, additional workshops were held in Memphis, Cleveland, and Knoxville.

The UTK faculty team was invited to conduct workshops in Nashville and Memphis in June 1979. However, during April the State Advisory Council for Career Education decided to utilize Tennessee's federal allocation under the Career Education Incentive Act for a series of in-service workshops, and to invite some or all members of the UTK team to participate as staff for the workshops. Since both Nashville and Memphis were to be sites of the State-supported workshops in August or September, UTK's June training programs in those cities were viewed as sources of potential conflict. Consequently, plans for the UTK workshops were cancelled.

Monthly newsletters. As individuals completed the various workshops their names were added to a mailing list, and each month persons on that list received a 3-5 page newsletter edited by the project director. The newsletter contained information on:

(1) developments related to CETA and career education legislation;

(2) implementation of Tennessee's State Plan for Career Education;

(3) career education programs and infusion ideas from other states;

(4) progress and problems encountered by UTK workshop participants as they attempted to put their career education plans into effect; and

(5) lesson-planning ideas from teachers who had participated in one of the UTK workshops.

Annotated bibliography. The UTK career education team emphasized in its workshops the fact that career education could be implemented by classroom teachers with little or no additional expense if they would simply point out the career implications of their subject matter. Nevertheless, professors found that inevitably several workshop participants would ask, "If someone gives us a little money to spend on career education, what should we buy?"

In order to provide an informed response to this question, the UTK team undertook a time-consuming effort to contact textbook publishers, view representative materials from each, rate these materials using a checklist prepared for the purpose, and prepare an annotated bibliography of those materials receiving the highest ratings. A copy of the bibliography appears in Appendix D.

Approximately 40 publishers were contacted, and of these, ten sent sample materials and ten sent representatives to the campus to present sample materials at meetings of the faculty team. At these meetings with publishers' representatives, team members would spend time reviewing the materials, then use the ten-item checklist which had been prepared in advance to rate the material. (See second page of the Bibliography in Appendix D.) Additional meetings of the team were held to evaluate sample materials mailed to Knoxville for the group's inspection.

Those materials that received an average rating on the ten checklist items of more than 4 (on a 5 point scale) were placed in a section of the Annotated Bibliography called "Highly Recommended." Materials receiving an average rating of 3.5-4 were placed in an "Also Recommended" section. Materials in the Bibliography were also categorized by grade level: Elementary (Grades 1-4), Middle (Grades 5-8), and Secondary (Grades 9-12).

When it was completed in May 1979, the Annotated Bibliography was mailed to every UTK workshop participant. Samples of most of the materials described in the Bibliography were obtained free of charge, or purchased, from their respective publishers so that the UTK career education team could display them in future classes or workshops.

## Objective 6

The sixth objective was "To develop a plan for disseminating (a) information from the workshop and follow-up activities to all public schools and to all teacher preparation institutions in the State, and (b) workshop materials to additional schools which might be interested in using them."

Information about the initial career education workshop held in Knoxville July 24-August 11, 1978, was mailed to every principal in Tennessee during the first week of June 1978. (See brochure in Appendix E.) A press release describing the workshop was prepared by the UTK Department of Public Relations and sent to newspapers throughout Tennessee. A memo from the Dean of the College of Education at UTK was mailed to the head of every department of education in colleges and universities in Tennessee to invite participation in the Knoxville summer workshop by interested representatives of the institution. Faculty members from two of the thirty-three teacher preparation programs contacted actually attended the Knoxville workshop. Finally, Tennessee's career education coordinator was asked to enlist the assistance of a field office representative in each of Tennessee's nine development districts to recruit in-service participants for the Knoxville summer workshop. Samples of materials used to publicize the workshop are included in Appendix E.

After the failure of the summer workshop to attract the desired number of participants, a letter was sent in November 1978 to all principals in East Tennessee to assess their interest in additional workshops. As a result of the response to this letter, workshops were set up in Cleveland in March and in Knoxville during April-May.

In May 1979 two efforts were initiated to make products of the training project available to public schools and to teacher preparation institutions throughout the State:

(1) A letter was sent to each of the 146 school superintendents in Tennessee. A one-page description of the UTK career education project ("Teamwork: Framework for Career Education in Tennessee") was enclosed, along with a "Request for Career Education Materials" form. Superintendents were asked to send the request form to any principal in the system who might be interested in receiving some examples of career education materials prepared during the project. Such materials included:

  (a) brief summaries of the six career education modules prepared by the UTK team;

  (b) the Annotated Bibliography of Commercial Career Education Materials;

  (c) lesson plans for infusing career education into approximately 15 courses at various grade levels, K-12.

  Approximately 65 requests from 18 of the State's 146 school districts were received in response to this letter.

(2) The Dean of the College of Education at UTK sent a memo to heads of departments of education in all other teacher preparation institutions in Tennessee. In addition to a description of the workshop project to date, the memo contained the suggestion that any interested faculty members in the other institutions be encouraged to request more information about such workshop materials as the Annotated Bibliography, lesson-planning ideas, and the in-service training modules prepared by the UTK team. Requests for these materials were received from faculty members at twelve of the thirty-three schools contacted.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

## PARTICIPANT SUMMARY

*NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.*

FORM APPROVED
OMB NO. 51-R1187

| NUMBER OF PARTICIPANTS *(see NOTE above)* WHO ARE | RACE/ETHNICITY *(all Participants including Handicapped, Gifted and Talented, and Low Income)* | | | | | | OF THE TOTAL *(column (6)* NUMBER WHO ARE | | | OF THE TOTAL *(column (6)* NUMBER WHO ARE | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AMERICAN INDIAN OR ALASKAN NATIVE (1) | ASIAN OR PACIFIC ISLANDER (2) | BLACK/ NEGRO (3) | CAUCASIAN/ WHITE (4) | HISPANIC (5) | TOTAL *(sum of columns (1) through (5))* (6) | HANDI-CAPPED (7) | GIFTED AND TALENTED (8) | LOW INCOME (9) | MALE (10) | FEMALE (11) |
| STUDENTS | | | | | | | | | | | |
| ELEMENTARY (K-6) | | | | | | | | | | | |
| MIDDLE/JUNIOR HIGH (7-9) | | | | | | | | | | | |
| SENIOR HIGH (10-12) | | | | | | | | | | | |
| 2-YEAR COLLEGE | | | | | | | | | | | |
| 4-YEAR COLLEGE | | | | | | | | | | | |
| ADULTS *(non-matriculated)* | | | | | | | | | | | |
| *SUB-TOTAL* | | | | | | | | | | | |
| EDUCATIONAL PERSONNEL | | | | | | | | | | | |
| TEACHERS | | 1 | 79 | 145 | | 225 | | | | 33 | 192 |
| COUNSELORS | | | 11 | 24 | | 35 | | | | 6 | 29 |
| ADMINISTRATORS | | | 12 | 28 | | 40 | | | | 29 | 11 |
| MEMBERS OF THE BUSINESS/ LABOR/INDUSTRY COMMUNITY | | | 1 | 15 | | 16 | | | | | |
| PARENTS | | | | | | | | | | | |
| OTHER *(specify)* | | | | | | | | | | | |
| TOTAL | | 1 | 103 | 212 | | 316 | | | | | |

OE FORM 467, 2/78

# EVALUATION

## Evaluation Design and Conduct

The evaluation of this career education training project was designed and carried out primarily by the project director, who routinely conducts program evaluations for the Bureau of Educational Research and Service at UTK. Dr. William Aiken, an evaluation specialist from the Tennessee Department of Education, interviewed the faculty team and wrote a summary of findings related to the project's process objectives 1, 2, and 3 (see Appendix F). Near the end of the project Dr. Charles Healy and Dr. Garth Sorenson, who directed, and evaluated, respectively, Project Cadre at UCLA in 1977, came to Knoxville to meet with the faculty team and discuss mutual successes and problems connected with the two similar in-service training projects. Upon their return to Los Angeles, Professors Healy and Sorenson wrote reports summarizing their impressions of the UTK program. The Healy-Sorenson report is included in Appendix G.

This "Evaluation" section contains summaries of the data derived from four instruments which were administered to participants in the various career education workshops.

- The "Pre-Workshop Needs Assessment" was given prior to instruction to provide an indication of participants' level of understanding of career education concepts so that instructors could adjust their teaching approaches accordingly.
- "Attitudes Toward Career Education Concepts" was administered at the first session and again at the last session of the workshops held in Knoxville and in Cleveland; it was designed to assess the initial attitudes of participants toward some basic career education concepts and to determine what change, if any, the workshop experience had on those attitudes.
- Change in knowledge related to learner outcome objectives for the workshop was measured via the "Pre/Post-Test for General Introduction to Career Education," also given at the first and last sessions in Knoxville and Cleveland.
- The "Career Education Workshop Evaluation" was completed by participants at the conclusion of all four workshops (though an abbreviated version was used at the one-day workshop in Memphis) and represented an attempt to elicit participant reaction to all important aspects of the workshop experience.

An item analysis of the "Pre/Post-Test for General Introduction to Career Education" and an assessment of the reliability of the "Attitudes Toward Career Education Concepts" instrument were conducted by Dr. Schuyler Huck, a measurement specialist in the UTK Department of Educational Psychology and Guidance, and his doctoral student, Mr. Sheldon Clark. The Huck-Clark report appears in Appendix H.

## "Pre-Workshop Needs Assessment"

*The "Pre-Workshop Needs Assessment" (see Appendix J) was administered* to participants prior to each of the workshops in order to ascertain their level of understanding of general career education concepts. The information thus gained was used to adjust the presentation of faculty team members to meet the needs of each workshop group.

The most significant conclusion drawn from the needs assessment was that fewer than 15 percent of the workshop participants represented schools or school systems that had adopted a definition of career education. Approximately half of the participants said they had a personal definition based on their own reading and experience, but more than 35 percent said they had "little or no acquaintance with definitions of career education." Additional questioning made it apparent that even those persons who had a personal definition knew little about the specifics of career education. Therefore, the workshop staff felt confident in beginning instruction at an elementary level.

More than half of the workshop participants recognized that career education is a K-12 concept; 5 percent thought it should be given most emphasis in the elementary school, 15 percent said the emphasis should come at the middle school level, and 20 percent felt career education should receive most emphasis in high school. A few participants admitted that they did not know where the emphasis should take place.

Not one workshop participant said it would be "very easy" for them to explain "infusion" as related to career education; 90 percent said it would be "difficult" to do this.

Almost three-fourths of the workshop participants were "not at all familiar" with the "historical development of the career education concept" or with "at least four national and/or state career education models." No more than half of the participants at any of the four workshops were even "somewhat familiar" with "career education curriculum development and implementation."

Most participants admitted that their knowledge of career education materials was limited: at least one-third had "virtually no" first-hand knowledge of career education materials; 60 percent said they knew of "a limited number" of materials; less than 5 percent were familiar with "a wide variety" of materials.

Participants expressed a positive attitude toward the idea of infusing career education into the curriculum in all classrooms: two-thirds said "regular classroom teachers should be expected to infuse career education concepts into their curriculum regardless of the subject or grade level taught." Just 10 percent thought that career education should be infused "only if (the teachers) volunteer to do so."

More than 90 percent of the workshop participants recognized that community involvement in career education is important. Almost as many understood that the involvement of business/labor/industry could include all of the following: (a) observational opportunities, (b) work experience, and (c) work-study opportunities, for both students and educators. However, more than half of the participants said they would find it "fairly difficult" or "very difficult" to "describe at least five strategies for bringing representatives of the community" into the career education program.

At least 90 percent of the participants at each workshop site admitted that their "present level of competence for implementing career education" was in need of "some" or "much" improvement.

When asked to identify what they would "most like to learn or accomplish" as a result of their participation in the career education workshop, most participants said they wanted to know "what it is and how to do it": they asked for definitions, resources, and information about how to use career education in their own setting, i.e., as teacher, counselor, or administrator.

## "Pre/Post-Test for General Introduction to Career Education"

The first version of the "Pre/Post-Test for General Introduction to Career Education" (see Appendix H) was designed to determine how much workshop participants' general knowledge of career education and use of community resources changed as a result of workshop instruction. This version of the test contained 18 multiple-choice items and was administered only to participants in the summer workshop held in Knoxville. Pre-test scores obtained by the Knoxville group ranged from 5, of 18, correct to 12, with a mean of 7.7. On the post-test scores ranged from 9 to 18 with a mean of 14.2. A t test for related means was calculated, and the difference between the pre-test and post-test means was highly significant ($t = 17.35$, 32 d.f., $p < .000$).

During the summer workshop only the modules "Introduction to Career Education" and "Community Resources in Career Education" were taught to all participants. The other modules were taught to groups composed of teachers or counselors or principals, meeting in separate sessions. Therefore, during the summer workshop the pre- and post-tests which were administered to all participants were based only on the two modules which were taught to the entire group. Professors providing instruction for the special groups conducted their own pre- and post-workshop assessments of knowledge.

For the workshops conducted in Cleveland and in Knoxville in the Spring of 1979, all modules were presented to all participants in general sessions. Therefore, the Pre/Post-Test was standardized for all participants and modified to include items not only bearing on the modules "Introduction to Career Education" and "Community Resources in Career Education" but on instruction in all modules. The resulting "Pre/Post-Test for General Introduction to Career Education" was administered to all participants in the Cleveland and Knoxville spring workshops.

When the tests for both workshops were combined, the number of cases for which both pre- and post-test scores were available was 138. The pre-test mean was 15.97 (standard deviation = 2.86). On the post-test the mean was 20.76 (standard deviation = 2.65). The t test for related means indicated that the improvement in post-test scores was highly significant ($t = 20.65$, 137 d.f., $p < .000$).

These highly significant t values provide some evidence that workshop instruction was, in general, effective in promoting knowledge of career education as measured by the instrument used. However, this conclusion must be tempered with the findings of an instrument analysis performed by Dr. Schuyler Huck and his graduate assistant Mr. Sheldon Clark. (See Appendix H for the entire report.) This analysis indicated that of 25 items on the "Pre/Post-Test for General Introduction to Career Education" only two items, Numbers 7 and 23, failed to violate one or more of the criteria established for judging item statistics. Interestingly enough, since some of the workshop instruction was based on materials developed by the Ohio Center for Vocational Education, some of the items included in a pre-test associated with those materials were included in the test designed for this workshop project. Specifically, items 1, 8, 9, and 10 were taken directly from the Ohio Center pre-test. A look at Table 1-C in Appendix H reveals that all of these items violated one or more of the established criteria. Five additional items from the Ohio Center pre-test were eliminated from the Pre/Post-Test after it was administered to the Knoxville summer workshop group because the content of those items no longer seemed essential to a beginning level of understanding of career education.

Item-objective congruence was established for the items on this instrument by the various instructors prior to use of the test. Overall, improvement in scores was significant following instruction. Unfortunately, the item analysis seems to indicate that in many cases the instructors were asking the wrong questions about the content of their modules, and even where the question may have been appropriate, the wording of the item proved to be a problem to those reading it. Prior to the design of a new instrument, workshop instructors should read the tips for writing multiple-choice items supplied by Huck and Clark in Appendix H.

## "Attitudes Toward Career Education Concepts"

### The Instrument and Respondents

The instrument "Attitudes Toward Career Education Concepts" (ATCEC), which appears in Appendix H, was designed to measure workshop participants' attitudes toward some basic career education concepts. It was administered to students in the three workshops for which academic credit was awarded, i.e., in both Knoxville workshops and in the one held in Cleveland. In order to measure any changes in attitudes which might have occurred as a result of the workshop experience, the instrument was given twice during each workshop: at the first session prior to any instruction, and again at the last session.

The ATCEC consisted of 31 items with which participants could agree or disagree. The following values were assigned to each response category: Strongly Agree - 4, Agree - 3, Disagree - 2, Strongly Disagree - 1. (A Neither Agree Nor Disagree response was treated the same as no response.)

Pre/post workshop pairs of scores on the ATCEC were obtained for 169 (86%) of the 196 persons enrolled in the three credit-bearing workshops. (Every participant who completed the workshop took the ATCEC as a post-test, but since the initial administration took place only at the first session, those participants who were not present at the first session did not have a pre-workshop score.) A t test for related measures was used to determine the significance of differences between pre- and post-workshop mean scores. The .01 level was selected as the criterion for significance. On this basis a significant change in attitude occurred after workshop instruction on 29 of 31 items. (The two items on which attitudinal change did not take place are 3 and 31.) In 11 instances the pre-post mean difference was significant when calculated for 169 participants but was not significant for one or two of the individual workshop groups.

For purposes of discussion, the 31 ATCEC items have been categorized according to the following topical outline:

(1) career education as a developmental continuum: K-12,

(2) career education: responsibility of every teacher in every classroom,

(3) career development as an important component of career education,

(4) some career education objectives for students,

(5) career education includes community involvement,

(6) relationship of career education and vocational education, and

(7) possible consequences of a career education emphasis.

In the tables which accompany the narrative,

d = difference between pre- and post-workshop means,

t = t value for related means,

p = 2-tail probability associated with a t of that magnitude, where N = 169 or the exact number of respondents for the item.

The figures 1, 2, and 3 are used to refer to the participants in each of the three credit-bearing workshops, as follows:

1 = Knoxville summer,

2 = Cleveland,

3 = Knoxville spring.

This coding system is used to indicate an insignificant pre-post workshop difference for one or more workshop groups even though the overall mean difference was significant. For instance, if, as in Table 2, the figure 1 appears with a probability, this means that the pre-post workshop difference for the Knoxville summer participants was not significant, and that the probability level was .64.

## Items Related to Topic One: "Career Education as a Developmental Continuum: K-12"

Six of the ATCEC items dealt with the concept of career education as a continuous process which should be initiated early in the development of every child, including those with special needs, and continued throughout the years of schooling. In general, participants began the workshop in basic agreement (or disagreement, as in the case of Item 17) with these items, but overall that level of agreement (or disagreement) increased substantially, apparently as a direct result of the workshop instruction. For example, prior to instruction 54 percent of the participants in the Knoxville spring workshop strongly agreed with Item 18; but by the time the workshop ended, 87 percent strongly agreed.

Data recorded in Table 2 indicate that as a result of workshop instruction participants significantly increased their belief that career education is a developmental process, for all students, which should be presented at the earliest opportunity and continued as long as the individual is in school.

Table 2. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic One Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 2. Career education emphasizes a developmental continuum of educational experiences beginning in early childhood and extending into adulthood. | 3.70 | 3.92 | .22 | 4.81 | .00 |
| 8. Children can be introduced to ideas about working for a living and to realities of wage earning in the elementary school. | 3.47 | 3.73 | .26 | 5.35 | .00 |
| 9. A career education orientation is especially relevant to students with special needs and learning disabilities. | 3.48 | 3.77 | .29 | 4.87 | .00 |
| 17. Elementary school is too early for a student to start thinking about career possibilities. | 1.49 | 1.20 | -.29 | -5.46 | .00<br>(1, p ≤ .64)* |
| 18. Career education is for all students including those with special needs and those who intend to continue their education beyond high school. | 3.51 | 3.90 | .39 | 8.30 | .00 |
| 19. Career education should be available to students from kindergarten through grade 12. | 3.40 | 3.88 | .48 | 9.75 | .00 |

*Item 17 initially elicited a response approximately half-way between Disagree and Strongly Disagree. After the workshop experience, respondents disagreed more strongly with this item. Taken together, the attitudes of the three workshop audiences changed significantly with respect to this item, but the pre-post difference for the Knoxville summer participants was not statistically significant.

## Items Related to Topic Two: "Career Education: Responsibility of Every Teacher in Every Classroom"

Data in Table 3 strongly suggest that the workshop experience gave participants a stronger feeling that career education should be presented by every teacher, in every subject, at every grade level, rather than by a counselor or vocational teacher, or in a separate course at the secondary level.

Table 3. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Two Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 10. Objectives of career education are congruent with those of education generally. | 3.08 | 3.60 | .52 | 9.16 | .00 |
| 13. Career education should be the responsibility of a special teacher or counselor rather than classroom teachers. | 1.76 | 1.18 | -.58 | -10.41 | .00 |
| 20. The regular classroom teacher is able to provide pupils with occupational and career information while teaching subject matter. | 3.14 | 3.67 | .53 | 9.80 | .00 |
| 28. Students should be told about different jobs and job requirements during the study of every subject at every grade level. | 2.82 | 3.27 | .45 | 5.79 | .00<br>(2, $p \leq .10$) |
| 30. Each teacher has the responsibility to emphasize the contribution of his/her teaching assignment to career development, regardless of level or discipline. | 3.11 | 3.48 | .37 | 7.16 | .00 |

### Items Related to Topic Three: "Career Development as an Important Component of Career Education"

Data in Table 4 indicate that as a result of the workshop experience participants increased their conviction that career education includes career development, i.e., acquiring increasingly accurate understanding of self, exploring one's life roles, and learning to make decisions.

Table 4. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Three Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 4. Identification of career information resources is an essential activity in the student's decision-making process. | 3.32 | 3.55 | .23 | 4.24 | .00<br>(2, $p \leq .06$) |
| 7. Career education provides an opportunity for students to acquire knowledge and skills that will be applicable in choosing careers both in the immediate future and in later adult life. | 3.46 | 3.80 | .34 | 7.70 | .00 |
| 11. A low-priority career education objective is understanding the relationship among personal economics, life-style and occupational roles. | 2.21 | 1.80 | -.41 | -4.31 | .00 |
| 14. A key objective of career education is to enable the individual to function effectively and be responsible for personal wants and needs. | 3.25 | 3.47 | .22 | 4.19 | .00 |
| 15. An integral part of the career education concept is the emphasis on attitudes toward work and informed decision-making. | 3.33 | 3.64 | .31 | 6.64 | .00 |
| 21. Career education includes the development of skills and attitudes which are integral parts of developing one's life style, including leisure pursuits, family life, and retirement. | 3.29 | 3.79 | .50 | 9.89 | .00 |
| 31. Career education programs encourage students to make a career choice before entering high school. | 2.17 | 2.11 | -.05 | 0.78 | ns |

### Items Related to Topic Four: "Some Career Education Objectives for Students"

Items included in Topic Four suggest some of the desired student outcomes if a career education program is instituted in a school system. Data recorded in Table 5 indicate that participants in the career education workshops came with positive attitudes toward these objectives for students, but left with even more positive attitudes.

Table 5. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Four Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 3. Every student should have at least one paying job before graduating from high school. | 3.20 | 3.31 | .11 | 1.79 | ns |
| 5. Students should understand the relationship of their present and future occupational status in relation to the economic trends and projections within the nation, state, and community. | 3.34 | 3.56 | .22 | 3.99 | .00<br>(2, $p \leq .03$) |
| 23. Every student leaving high school should have a saleable skill or should be prepared to make a meaningful choice about his/her career, i.e., further education, training, etc. | 3.49 | 3.68 | .19 | 3.72 | .00<br>(2, $p \leq .17$)<br>(3, $p \leq .02$) |

## Items Related to Topic Five: "Career Education Includes Community Involvement"

Data in Table 6 show the initial level of agreement with the concept of community involvement in career education and the increase in this level which occurred as a result of participation in the career education workshops.

Table 6. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Five Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 1. Learning in career education is not reserved for the classroom, but utilizes home, community, business, industry and other available resources. | 3.70 | 3.92 | .22 | 4.81 | .00<br>(3, $p \leq .04$) |
| 6. Most local business and professional people would be willing to help with a career education program in the schools. | 3.05 | 3.33 | .28 | 5.71 | .00<br>(1, $p \leq .10$) |

## Items Related to Topic Six: "Relationship of Career Education and Vocational Education"

Data in Table 7 suggest strongly that during the career education workshops participants came to understand more clearly the distinction between career education and vocational education. This is most evident in the pre- and post-workshop responses to Item 25--.79 is the largest mean difference recorded for the ATCEC with these 169 participants.

Table 7. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Six Items

| Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|
| 25. Career education is another name for vocational education. | 2.08 | 1.29 | -.79 | -12.09 | .00 |
| 27. The present high school vocational education courses teach students enough about the world of work. | 1.81 | 1.43 | -.38 | -7.00 | .00 |
| 29. Vocational education is included within the concept of career education. | 3.01 | 3.53 | .52 | 9.32 | .00 |

## Items Related to Topic Seven: "Possible Consequences of a Career Education Emphasis"

Data in Table 8 indicate that participants in the career education workshops began with positive expectations about the possible effects of career education on students, and the workshops significantly increased the level of those expectations.

Table 8. Pre- and Post-Workshop Means, Mean Difference, t and Probability of t for Topic Seven Items

| | Item | Pre-Workshop Mean | Post-Workshop Mean | d | t | p |
|---|---|---|---|---|---|---|
| 12. | Career education provides a unifying thread that increases the relevance of academic instruction. | 3.28 | 3.64 | .36 | 6.79 | .00 |
| 16. | When career education is emphasized in the curriculum the nature of the learner becomes the focus rather than a body of content. | 3.05 | 3.25 | .20 | 2.89 | .00<br>(1, $p \leq .45$) |
| 22. | Career education prepares individuals for college as well as employment. | 3.26 | 3.68 | .42 | 8.69 | .00 |
| 24. | An effective program of career education would lower the school dropout rate. | 3.30 | 3.55 | .25 | 5.23 | .00 |
| 26. | The quality of education would be improved by an emphasis on jobs and work. | 3.03 | 3.21 | .18 | 2.95 | .00<br>(1, $p \leq .34$)<br>(3, $p \leq .11$) |

## "Career Education Workshop Evaluation"

The instrument entitled "Career Education Workshop Evaluation" was administered at the final session of the workshops held in Cleveland and in Knoxville in the Spring. An abbreviated form of this evaluation instrument was given at the close of the one-day workshop held in Memphis. A version containing additional items was administered to participants in the Knoxville summer workshop. The following summary of findings is based on the composite of these four administrations; separate sections of the narrative deal with those items used only in the three workshops for which academic credit was given, and those items administered at all four workshops. Percentages based on the compilation of responses from more than one workshop reflect differential weighting of responses based on the number of participants in each workshop.

Approximately half of the items in the CEWE were adapted from those in a similar instrument used by the Interinstitutional Consortium for Career Education in Salem, Oregon (University Staff Development in Career Education. ICCE, 1977, pp. 77-78.)

### CEWE Items Administered Only to Participants Receiving Academic Credit

A longer version of the CEWE was administered to participants in the two workshops held in Knoxville and the one held in Cleveland because those workshops covered much more material than was presented during the one-day session in Memphis. In addition, since academic credit was awarded, it was important for the faculty team to assess participant reaction to its presentations so that future teaching plans could be modified if necessary. The following statistics are derived from questionnaires administered in Knoxville in August 1978, in Cleveland in March 1979, and in Knoxville in May 1979.

First the CEWE sampled opinion concerning the instructional techniques used in the workshops:

- 50 percent of the participants evaluating the workshops in Knoxville and Cleveland considered "the amount of time spent on lecture" to be "about right for the material presented," 16 percent thought too much time was spent on lecture, 30 percent said the time spent on lecture "could have been spent on other activities."
- 88 percent of the participants in the first Knoxville and Cleveland workshops thought "small group meetings" were "effectively incorporated into the workshop," but only 53 percent of those attending the second Knoxville workshop felt this was the case.

- 70 percent said "audio-visual presentations" were "used with great effectiveness" (82 percent of the participants in the first Knoxville workshop gave this response, but less than half of those in the April-May Knoxville workshop did so. A suitable* classroom for 108 persons was not available for the second Knoxville workshop and this limited the use of audio-visual equipment by the faculty team.)

- 90 percent of the participants in the first Knoxville and Cleveland workshops felt the opportunity for discussion during the workshop was adequate, but only half of the 108 participants in the second Knoxville workshop were satisfied with the opportunity for discussion.

A second section of the CEWE concerned "workshop presenters":

- 80 percent of all workshop participants (97% - Cleveland, 80% - Knoxville summer, 60% - Knoxville spring) considered the professors on the workshop team well prepared.

- 80 percent of all participants (91% - Cleveland and Knoxville summer, 60% - Knoxville spring) felt the professors on the team were sensitive to participants' needs.

- 70 percent of the participants considered comments and/or instructions given by the professors to be generally clear and helpful; only 6 percent said the professors' instructions were "difficult to understand."

- 89 percent of the workshop clientele (97% - Cleveland and Knoxville summer, 72% - Knoxville spring) felt the professors encouraged open communication during the workshops.

Three CEWE items were related to aspects of group process:

- 90 percent of all workshop participants said they felt "welcome to ask questions."

- 85 percent said the workshop group could be described as "very open, enjoying excellent rapport" (45%) or "fairly open, with reasonably good communications" (40%).

- 95 percent of the Cleveland and the Knoxville summer participants said they felt "involved" during workshop activities/exercises; only 55 percent of the Knoxville spring workshop group felt sufficiently involved.

*A classroom accommodating 75 persons was originally requested for the workshop held in Knoxville in April-May 1979. The deadline for registration for this workshop was March 15. Prior to March 8 only 50 applications had been received. By March 15 this total reached 125. Some of those who registered did not attend, but on such short notice a classroom for 108 was not available on the UTK campus. Two rooms were tried: one was long and narrow so that those in the back could neither see nor hear speakers at the front of the room; the second was a dimly lighted auditorium with poor acoustics. The inadequacy of the facilities colored all the perceptions of the participants in the second Knoxville workshop.

Participants taking the career education workshop for academic credit were asked to rate the quality of the curriculum modules presented during the workshop as "excellent," "good," "fair," or "poor." Since participants in the Knoxville spring workshop had more negative perceptions of the workshop than did Cleveland and Knoxville summer participants, their responses have been treated separately in Table 9 below:

Table 9. Percentages of Participants Rating Each Module "Good" or "Excellent"

| Module | Cleveland and Knoxville Summer | Knoxville Spring |
|---|---|---|
| "Introduction to Career Education" | 96 | 69 |
| "The Counselor's Role in Career Education" | 81 | 65 |
| "Career Education for the Handicapped" | 95 | 78 |
| "The Administrator's Role in Career Education" | 78 | 66 |
| "Infusing Career Education into the School Curriculum" | 92 | 60 |
| "Community Resources in Career Education" | 97 | 79 |

Participants in the Knoxville summer workshop completed a more extensive evaluation of each module. Summaries of these evaluations appear in Appendix K.

Three CEWE items provided a summary of participants' overall reactions to the workshop experience:

- 56 percent of the participants said the career education workshop was the first workshop "of this type" which they had attended; of those who had attended similar workshops, all Cleveland participants, 78 percent of the Knoxville summer group, and 28 percent of the Knoxville spring participants indicated that the workshop was "similar to" or "more effective" than the others they had attended.
- 95 percent of the Cleveland and Knoxville summer participants said their overall assessment of the workshop was that it had been "a worthwhile experience;" 60 percent of the Knoxville spring participants responded similarly.
- 100 percent of the participants in the three workshops said they intended "to implement methods or materials introduced in this workshop;" 35 percent said they would implement their plans "immediately," and the remainder indicated that they would do so "within the next year."

## CEWE Items Administered to Participants in All Four Workshops

In spite of all efforts on the part of the project director to supply advance information about the workshop to potential participants, half of those who attended reported that they were not "adequately informed about the nature and purposes" of the workshop before they came. Fortunately, the percentage who felt informed improved (from 48% for the first Knoxville workshop to 56% for the second) over the course of the project. But if even the fourth attempt to make clear the purposes of the workshop was not successful with 44 percent of the participants, something was wrong.

At least two explanations may be proposed for this perceived lack of advance information: first, the information was sent to principals and they may not have passed all of it along to the teachers and counselors who eventually came to the workshops; second, most workshop participants admitted that the workshop changed their initial concept of career education significantly. Perhaps the participants' perception at the end of the workshop that they had not understood its purposes before they came was at least partially due to the fact that they found career education to be very different from what they had thought it was prior to the workshop. In any case, more lead time for providing notice of the workshops and for follow-up communication with those interested in attending would probably have helped increase understanding of workshop purposes prior to participation.

Despite their lack of advance understanding of the nature of the workshop, 90 percent of the participants in three of the workshops were willing to say that they would have attended if they "had known what it would be like." Only 60 percent of the participants in the second Knoxville workshop responded similarly.

Less than 15 percent of the participants in three workshops felt they "could have learned as much about career education" on their own as they learned during the workshops. More than one-third of the Knoxville spring participants said they could have learned as much on their own.

Almost 95 percent of the participants in three of the workshops said they would recommend the workshop to a friend if it were offered again. Only 60 percent of the participants in the workshop held in Knoxville in the spring said they would recommend it.

Apparently this career education workshop should be offered for groups of no more than 50 individuals. Almost 95 percent of the Cleveland and Knoxville summer participants felt the size of their workshop (48 and 40 participants, respectively) was "about right." Two-thirds of the Knoxville spring and 25 percent of the Memphis participants said their workshop was too large (108 and 104 participants, respectively). This response difference between the two large workshop audiences strengthens the conclusion that the size of the group, which necessitated using a poorly lighted room with poor acoustics, was the single most important factor in causing the relatively negative ratings assigned to workshop features by the Knoxville spring participants. The Memphis audience sat at tables, as school-based teams, in a brightly lighted school library.

For the items included in Table 10 the response percentages for the Knoxville spring participants again are reported separately:

Table 10. Percentages of Participants Rating Selected Workshop Features "Good" or "Excellent"

Responses to the question "How would you rate each of the following":

| | Three Workshops | Knoxville Spring |
|---|---|---|
| 1. overall quality of the instruction you received during the workshop? | 90 | 51 |
| 2. overall quality of the learning materials you received during the workshop? | 94 | 72 |
| 3. the quality of the equipment and facilities used during the workshop? | 88 | 34 |
| 4. the quality of the advance planning and organization of the workshop? | 86 | 62 |

The fact that almost two-thirds of the participants in the second Knoxville workshop considered the facilities "fair" or "poor" provides further evidence of the devastating effect of the dimly lighted auditorium used to accommodate the large enrollment on the participants' overall perceptions of that workshop.

Participants in all four workshops were asked three open-ended questions. In response to the item "What workshop topic interested you most?":

- Participants in the workshop held in Knoxville in the summer were most interested in the sessions on infusion of career education in the curriculum, topics contained in the introductory module (historical development of career education, legislation, national and state models), and utilization of community resources (visits to worksites, employer panel, suggestions for making contacts within the community).
- Memphians were most interested in community involvement in the career education program, and infusion of career education in the curriculum at all grade levels.
- Cleveland participants valued the presentations on infusion most, followed by career education for the handicapped, introduction to career education, and community involvement in the career education program.

- Those taking part in the second Knoxville workshop were most interested in the presentations on career education for the handicapped, infusion, community involvement, and the principal's role in career education.
- When all responses were combined, the three most popular topics were infusion, community involvement, and career education for the handicapped.

Less than half of the participants listed workshop topics they liked "least." Probably since most of the participants were teachers, they found least relevance in the presentations on the administrator's role and the counselor's role in career education. (Conversely, the most popular topic was infusion of career education into the curriculum--a topic designed primarily for teachers.)

Participants were also asked to suggest additional topics which "should have been included in the workshop program but were not." Most of the suggestions were related to the need for more "hands-on" experience--more viewing and evaluating of career education materials, more concrete illustrations of infusion in specific curriculum areas. (Video tapes were suggested as a means to this end.) A few participants suggested that more time be spent on evaluation techniques, sources of funding, and consideration of local employment opportunities.

The most gratifying comments on the workshop were recorded on the CEWE forms of two Cleveland participants. One said, "I felt that the workshop was well organized. I have never attended a workshop with such enthusiasm which lasted for the duration of the course." Another wrote, "Six weeks ago I wasn't aware of career education. Now I don't think I could forget it if I tried! I don't see how any of the teachers involved can help but go back to their school and infuse career education into whatever subject they teach."

## Evaluation Summary

The evaluation was designed to assess the achievement of the six process objectives which provided direction for this training project. For each objective several evaluative questions were posed and appropriate data collection procedures were specified. In this segment of the report those evaluative questions will be repeated along with the data bearing on each.

### Evaluation of Objective 1

| Objective 1 | Related Evaluative Questions | Data Collection Procedures |
|---|---|---|
| Utilize an interdisciplinary team of College of Education faculty members representing five major departments to plan the curriculum for a multidiscipline career education training program. | 1a. Did the faculty team work together?<br>1b. Was the curriculum actually planned? | 1a,b. Observation, and interviews with faculty members. |
| | 2. Did workshop participants react positively (i.e., average item score above mid-point of scale for all relevent items) to the interdisciplinary approach used in the workshop? | 2. End-of-workshop questionnaire for participants. |
| | 3. Did school-based teams continue to function as teams in implementing career education plans in their own schools? | 3. Follow-up questions, and observation of participants. |

1a,b. Following the first workshop Dr. William Aiken talked at length with the project director, reviewed the curriculum modules prepared for the workshop, and conducted a group interview of the faculty team. He concluded ( see report in Appendix F) that indeed a detailed curriculum plan had been prepared and that the faculty members had functioned at least part of the time as an integrated team to present the curriculum.

During the first workshop session in Knoxville the team worked together to present an overview of the workshop and each professor's part in it. Near the end of the workshop the team came together again to hear participants' plans and to evaluate those plans. In the interim the professors worked in pairs or in threes, but did not overtly function as a team in a way that was apparent to workshop participants. In fact, a few participants complained that they were receiving contradictory instructions for preparing their implementation plans from different members of the team. This finding, plus the experience of presenting the workshop as a team during the one day in Memphis, convinced the faculty members that they should do more work together--even to the point of presenting all materials to all participants rather than separating the various disciplines for separate sessions on the counselor's role, the principal's role, and the teacher's role in career education. Joint presentations were tried at the workshop in Cleveland and were well received; this approach was continued during the second workshop held in Knoxville.

2. Participants in the first Knoxville workshop were asked to what extent ("quite adequately" - 3, "to some extent" - 2, or "not at all" - 1) they felt the workshop had accomplished the goal of "utilizing an interdisciplinary team to present a career education training program." Almost all (97%) of the participants felt this goal had been met "quite adequately" (49% said this) or "to some extent" (48% said this). The mean rating for this item was 2.45, well above the mid-point of the 3-point scale. Since the response to this item among participants in the first workshop was so positive, it appeared that this objective had been accomplished satisfactorily, and in the interest of shortening the evaluation questionnaire, this item was eliminated from subsequent versions.

In another attempt to assess the reaction to the interdisciplinary approach planned by the UTK faculty team, participants in all four workshops were asked to rate the "quality of instruction...received during the workshop" on a 4-point scale (4 = "excellent," 3 = "good," 2 = "fair," 1 = "poor"). The mean rating for quality of instruction was 3.08.

3. Follow-up visits and telephone conversations with participants indicated that team members from the same school continued to work together on career education following the workshop. The one full team taking part in the summer workshop came from Vine Junior High School in Knoxville. In February the project director visited Vine and talked with that team, and it was obvious that the principal, counselor, and two teachers had been working together closely in implementing their career education plans. The principal had talked with all his faculty members about career education at their orientation meeting in the Fall, and had encouraged the faculty to join the team in putting career education into practice in all subjects at all grade levels. The counselor on the team had acquired some new guidance materials, and the two teachers had been very active in incorporating career education in their lesson plans.

Two teachers from Oak Ridge were engaged in team teaching together and thus met daily to plan cooperatively.

Participants in the Cleveland workshop worked together as teams for nearly two hours every Saturday during the 5-week workshop held there. At mid-week each team received a call from its UTK faculty consultant, and in many cases the team was meeting at the time of the call. Follow-up contacts with the teams in April and May produced evidence that team members were still getting together to provide each other mutual support as they used their career education plans.

Principals were asked to attend the career education workshop as a member of their school-based team because a substantial body of empirical evidence indicates that initiation and maintenance of an instructional innovation have a far better chance of succeeding if the principal is well informed about the innovation and provides administrative support for its implementation. In May 1979 participants in the Knoxville summer and Cleveland workshops were surveyed (see "Second Follow-Up Questionnaire" in Appendix C) to ascertain to what extent they considered:

(1) the principal's support to be an important factor in their implementation of career education plans, and

(2) the principal's participation in the training workshop to be an important factor in obtaining her/his support for career education.

Approximately three-fourths of those surveyed responded, and replies were received from all schools represented at the Cleveland workshop (where participation by teams was much more extensive than at the Knoxville summer workshop).

In response to the question "In your opinion, how important is it to have your principal's support if you want to utilize career education in your work?" teacher and counselor respondents gave these replies:

Not important - 7%  Fairly important - 27%  Very important - 66%

Teachers and counselors were asked, "In your opinion, how much influence did attendance at the Career Education Workshop have on your principal's level of support for career education?" From those whose principal had attended the workshop the following replies were received,

No influence - 0%  Some influence - 14%  Much influence - 86%

Team members whose principal had not attended the workshop were asked, "How much influence do you feel the workshop would have had if your principal had attended?" This segment of the sample provided the following responses:

No influence - 4%  Some influence - 39%  Much influence - 57%

Finally, teachers and counselors were asked, "In your opinion, how important is it that a principal attend such a workshop if he/she is to provide the level of support needed for implementation of a school career education program?"

Not important - 0%  Somewhat important - 20%  Very important - 80%

All of the principals who responded to the survey perceived themselves as being "very important" sources of support in implementing career education in their schools.

By their responses to the following items all of the principals indicated that their support is "very important" or exerts "much influence" on the faculty:

- How important is it that the faculty have the principal's support if they wish to use career education in their work?
- How much influence did attendance at the Career Education Workshop have on your level of support for career education?
- How important is it that a principal attend such a workshop if she/he is to provide the level of support needed for implementation of a school career education program?

These replies tend to confirm the belief of workshop planners that the principal is an important member of the career education team and should receive training along with other members of the team.

The second Knoxville workshop ended too near the close of the school year to permit meaningful follow-up of those participants, but several in that workshop group listed as the most positive aspect of the program the opportunity to work on a team with other members of their school faculty.

## Evaluation of Objective 2

| Objective 2 | Related Evaluation Questions | Data Collection Procedures |
|---|---|---|
| Integrate modules based on previously existing materials to form a comprehensive training program. | 1. Were existing materials utilized extensively--especially materials developed in Tennessee? | 1. Observation, and faculty interviews. |
| | 2a. Did participants perceive that modules were appropriately integrated? | 2a. End-of-workshop questionnaire for participants. |
| | 2b. Did workshop participants react positively (i.e., average item score above mid-point of scale) to module content? | 2b. End-of-workshop questionnaire for participants. |

1. Dr. Aiken's evaluation report made reference to the extent to which the faculty team had used existing materials, especially those developed in Tennessee, in the six curriculum modules that formed the foundation for workshop content. Additional references may be found in Appendix A with the learner outcome objectives for each module. In general, however, the faculty team relied most heavily on the teacher training materials developed by the Center for Vocational Education at the Ohio State University, Oregon's Interinstitutional Consortium for Career Education, Michigan State University and the Michigan Department of Education, Stephen F. Austin University in Texas, and the "Career Education for Teacher Educators" project at The University of Georgia. Ideas for needs assessment plans were taken from materials published by the Wisconsin and Tennessee state departments of education. Lesson planning ideas for teachers were obtained from materials developed by the Jefferson County (Kentucky) Schools and the National Center for Career Education in Missoula, Montana.

According to Aiken's report, "The team members had taken specific measures to include materials developed in Tennessee." Some federally funded career education projects in Tennessee had produced sets of curriculum materials that were not used after funding was terminated. The UTK faculty team felt a State-wide service might be rendered if, during the course of the workshop, participants could become acquainted with some of these materials and begin to make use of them. Accordingly, sets of materials were gathered from the following school systems and made available for participant use in developing their implementation plans:

Knox County/Anderson County Schools
Greeneville Schools
Memphis Schools
Tullahoma Schools
Hamilton County Schools

2a. Apparently participants in the first Knoxville workshop perceived that the six curriculum modules developed by the faculty team had been satisfactorily integrated to form a comprehensive training program. In response to a post-workshop evaluation question, all Knoxville summer participants said that this workshop goal had been achieved "quite adequately" (58% said this) or "to some extent" (42% said this). The mean rating for this item was 2.58, well above the mid-point of the 3-point scale. Since it appeared that this workshop objective had been accomplished to the satisfaction of the first workshop auidience, this item was eliminated when the evaluation questionnaire was shortened for the three other workshops.

2b. Participants in the Cleveland workshop and in the two held in Knoxville were asked to rate the quality of the curriculum modules on a 4-point scale: 4 = "excellent," 3 = "good," 2 = "fair," 1 = "poor." An overall rating for each module was obtained by pooling and averaging the ratings of participants in all three workshops. All ratings were above the scale mid-point of 2.5.

| Module | Overall Rating |
|---|---|
| "Introduction to Career Education" | 3.30 |
| "The Counselor's Role in Career Education" | 3.05 |
| "Career Education for the Handicapped" | 3.31 |
| "The Administrator's Role in Career Education" | 3.02 |
| "Infusing Career Education into the School Curriculum" | 3.21 |
| "Community Resources in Career Education" | 3.38 |

Participants in the Knoxville summer workshop completed an individual evaluation of each of the six modules. Summaries of these evaluations appear in Appendix K.

## Evaluation of Objective 3

| Objective 3 | Related Evaluation Questions | Data Collection Procedures |
|---|---|---|
| Present a workshop for teams consisting of the principal, a counselor, and two teachers, from at least 27 schools in Tennessee. | 1a. Did the workshop take place? | 1a,b. Observation, and interview with project director. |
| | 1b. Did 27 full teams participate? | |
| | 2. Between the first workshop session and the last was there a significant positive change in participants' attitudes toward career education concepts? | 2. Administer the instrument "Attitudes Toward Career Education Concepts" (ATCEC) at first and last workshop sessions. |

1a. Announcement of the grant award for this training project was not made until May 1978, and no funds could be spent before mid-May. By the time the UTK Office of Workshops and Off-Campus Programs was able to compile a brochure and mail it to all the schools in Tennessee, it was early June. Schools in metropolitan Nashville and elsewhere had already been dismissed for the summer vacation. Most other schools were completing their last week. As a result of the late mailing, not one of the more than 1700 principals who received the letter returned the registration form for the workshop. Consequently, the project director spent four weeks, from mid-June to early July, calling principals to encourage them to send at least one representative, and contacting career education leaders in public schools and the State Department of Education to solicit their assistance in increasing the workshop enrollment.

To quote again from the Aiken evaluation report,

> "The greatest single factor affecting the team's ability to work together seemed to center around the preplanning aspect of the project. Several of the team members indicated that there was an insufficient amount of lead-time...to make sufficient plans for the workshop. Specifically, the (beginning of the) funding cycle of the project had a detrimental effect on the team in making advance plans for the workshop. (There was) little time for recruiting local education agency personnel to attend the summer workshop. The project director spent a month on recruitment rather than planning....The workshop had a lower number of participants than was anticipated, affecting the morale of the interdisciplinary team. One must conclude that the planning process could have been greatly facilitated by discovering alternatives which would have given more time for this phase."

1b. When the summer workshop was held in Knoxville, there were 40 participants, with only one full team, and a second principal accompanied by one teacher. Since the contract indicated that 27 full teams, a total of 108 individuals, would be served, the team decided to offer other workshops during the 1978-79 academic year. Three additional workshops were held: one in Memphis, one in Cleveland, and one in Knoxville. Eventually, 300 individuals representing 85 schools (including 32 teams headed by an administrator in the three credit-bearing workshops) were served by the project.

2. Participants in each of the three credit-bearing workshops completed the instrument "Attitudes Toward Career Education Concepts" at the first and last workshop sessions. On 29 of 31 items participants exhibited a more positive attitude (significant at the .01 level) after instruction than they had initially.

Evaluation of Objective 4

| Objective 4 | Related Evaluation Questions | Data Collection Procedures |
|---|---|---|
| To assist each school-based team to develop or adapt a plan for implementing career education in its own school. | 1. Did school-based teams complete plans by the end of the workshop? | 1. Observation. |
| | 2. Was each plan evaluated by at least two workshop instructors? | 2. Inspection of project records. |
| | 3. Did the school-based teams carry out the implementation plans developed during the workshop? | 3. Observation and follow-up questionnaire for participants. |

1. In each of the three workshops for which credit was awarded no grade was assigned to any individual who did not submit a personal plan for implementing career education in his/her school setting. Individuals who were part of a school-based team contributed to an overall plan for the school.

2. A set of evaluative criteria (see Appendix B) was developed to guide instructors' evaluation of career education plans. The criteria were assigned values and listed on a sheet to facilitate the grading process. Two of the sheets were completed (each by a different instructor) before a grade was assigned to any plan. Soon after the conclusion of each of the credit-bearing workshops, the evaluation sheets, with the accompanying instructor comments, were returned to the individual or team completing each plan. Most of the plans were considered excellent: 85 percent were assigned a grade of "A" by the faculty team members.

3. In May 1979 a questionnaire ("Second Follow-Up Questionnaire" in Appendix C) was sent to participants in the Knoxville summer and Cleveland workshops. With telephone follow-up the response rate was increased to 75 percent. Replies were received from all schools represented at the Cleveland workshop. Of those who responded, all said they had made some use of the implementation plans developed during the workshop; 22 percent said they had used their plans "extensively." All respondents said they planned to make more use of their plans in the next academic year.

Evaluation of Objective 5

| Objective 5 | Related Evaluation Questions | Data Collection Procedures |
|---|---|---|
| To provide technical assistance via<br>(1) a newsletter,<br>(2) a regular consulting service, and<br>(3) information about the progress and problems of the participants in implementing their plans. | 1. Was a newsletter provided to project participants?<br>2. Was a consulting service provided?<br>3. Did follow-up contacts with participants provide information about the progress and problems of other teams? | 1,2,3. Inspection of project records. |

1. Illustrative copies of the seven newsletters which were mailed to all participants in previous workshops (i.e., participants' names were added to the mailing list at the conclusion of each workshop) appear in Appendix C.

2. The workshop in Memphis was held in part as a response to the request from a participant in the August workshop for in-service training in career education for others on her faculty. A second in-service presentation was made for the faculty of New Hopewell School in Knox County at the request of the librarian, who participated in the August workshop. Two additional requests for school-wide or system-wide in-service training were received from participants in the Cleveland workshop, but they could not be fulfilled until Fall 1979.

Approximately ten workshop participants called or wrote the faculty team during the year requesting lesson-planning ideas or student materials in a given subject or occupational area. These requests were filled.

3. At least two issues of the newsletter contained information about the progress of participants in previous workshops as they attempted to implement the plans made during the workshop. The May newsletter contained several model lesson plans developed by participants in the Cleveland and Knoxville spring workshops.

During telephone contact with some of the participants the faculty team provided information about other participants' progress and problems as these seemed relevant to the situation being considered.

## Evaluation of Objective 6

Objective 6 concerns the dissemination plan, which is the subject of the next section of this report. The evaluation of the various dissemination efforts is included with the description of those efforts.

# DISSEMINATION ACTIVITIES

## Components of the Dissemination Plan

The sixth and final process objective of this career education training project is "To develop a plan for disseminating: (a) information from the workshop and follow-up activities to all public schools and to all teacher preparation institutions in Tennessee, and (b) workshop materials to additional schools which may be interested in using them." The dissemination activities which were designed to implement this objective were categorized as follows:

(1) advertising the workshops--providing information about the workshops in order to encourage participation;

(2) information for workshop participants--newsletters, telephone calls, visits, and other forms of information intended to keep workshop participants apprised of current developments in career education, both nationally and locally;

(3) information for others--information about workshop activities and products for (a) public schools not participating in the workshops, (b) other teacher preparation institutions in Tennessee, and (c) other career education projects throughout the nation.

### Advertising the Workshops

Summer workshop. During the first months of the project the following activities were undertaken to inform public school personnel throughout Tennessee of the training opportunities to be provided via the career education workshop scheduled for July 24-August 11, 1978, at the University of Tennessee, Knoxville:

(1) A cover letter and brochure (see Appendix E) were mailed to each of the more than 1700 public school principals in Tennessee inviting the principals to name a four-person team, consisting of administrator, counselor, and two teachers, to attend the summer workshop.

(2) The UTK Department of Public Relations prepared a news release (see Appendix E) to publicize the summer workshop, and on June 29 the article was released to newspapers throughout Tennessee.

(3) Career education specialists in each of the nine district offices of the Tennessee Department of Education were telephoned by the project director, given information about the summer workshop, and encouraged to contact the principals in their districts to emphasize the importance and potential value of participation in the workshop.

In addition to informing public school personnel of the workshop, additional efforts were made to announce the workshop to other colleges and universities engaged in teacher preparation within the State of Tennessee. In June 1978 the Dean of the College of Education, UTK, sent a memorandum (Appendix E) to the head of the teacher preparation program at every Tennessee institution having such a program. The memo invited representatives of each teacher preparation faculty to attend the summer workshop to observe the instructional program and to collect materials which might be helpful to them in preparing similar in-service training programs at their own institutions.

Additional workshops. When it became apparent that enrollment in the summer workshop was insufficient to meet the personnel goals specified for the training project, publicity was prepared to stimulate interest in additional training activities.

During October and November 1978 the project director made presentations at several professional meetings for the purpose of stimulating awareness and interest in the training project on the part of professional educators in Tennessee.

- On October 27 the project director addressed the Career Education Department of the East Tennessee Education Association meeting in Knoxville.
- On November 10 the project director described the project and presented a paper entitled "Using Career Education as a Selection Criterion for Social Studies Texts" at a workshop for social studies teachers conducted by the Department of Curriculum and Instruction at UTK.
- On November 15 the project was publicized at the monthly meeting of the East Tennessee Personnel and Guidance Association held in Knoxville.
- On November 16 the project director presented a paper entitled "Career Education at UTK" at the Energy Opportunities Consortium Conference "On the Way to Work in Tennessee" at Knoxville's Hyatt Regency.
- On November 28 the project director described the training project at a seminar for the Tennessee Commission on the Status of Women which was held at the University of Tennessee, Nashville.

In November 1978 a letter and brochure describing the UTK team's career education training capabilities were mailed to all principals in East Tennessee. The principals were invited to express interest in naming a team to participate in a workshop to be held during Spring 1979. Approximately 40 principals did express such an interest, and two additional workshops were held: one in Cleveland, Tennessee, and another at the University of Tennessee, Knoxville.

## Information for Workshop Participants

Both materials and staff activities were designed to disseminate local and national information about career education to individuals who had participated in one of the career education workshops.

Newsletters. A monthly newsletter entitled "Career Education Communiqué" was developed by the project director and mailed to a list of workshop participants which was expanded at the end of each workshop to include all who had recently completed training. Through the newsletters the following types of information were disseminated:

- news of federal funding possibilities such as those provided by the Career Education Incentive Act and CETA legislation,
- activities of the State Coordinator of Career Education in Tennessee,
- announcements of future workshops,
- news from former workshop participants regarding implementation of their career education plans in their own schools,
- exemplary lesson plans submitted by workshop participants as part of their implementation plans,
- descriptions of exemplary career education programs in other states, and
- listings of newly published materials.

Annotated Bibliography of Commercial Career Education Materials. During the workshops the UTK faculty team attempted to present career education as a curriculum component which could be implemented by teachers with little or no additional funding if they would simply add career illustrations to the subject matter they were teaching. Nonetheless, some workshop participants always asked the question, "What materials should we buy if given the opportunity?"

In an attempt to provide an informed response to this question, the faculty team undertook an intensive investigation of materials from commercial publishers. Approximately 40 publishing firms were contacted and asked to provide sample materials on approval, or to send a representative to present and explain their materials. The faculty team met with ten publishers' representatives during January, February, and March 1979 to acquire first-hand information about (1) the development of each firm's materials, (2) steps taken to eliminate racial bias and sex-role stereotyping, and (3) the sequencing of various series. Fifteen publishers sent sample materials for the group's review, but no representative of these firms came to make a presentation.

In an attempt to standardize the materials evaluation, a ten-item rating form was developed. This form appears in Appendix D on the second page of the Bibliography. Each professor rated each item using a 5-point scale. All ratings for each set of materials were summed and a mean was calculated. Materials having a mean rating above 4 on the 5-point scale were characterized as "highly recommended" by the faculty team. Materials having ratings of 3.5 to 4 were placed in the category "also recommended." Brief descriptions of the materials thus categorized were developed for purposes of compiling an annotated bibliography. The grade level for which each set of materials was designed was highlighted by a marginal notation, and current prices for the materials were listed.

The "Annotated Bibliography of Commercial Career Education Materials" was completed in early May 1979 and was immediately distributed to all public school personnel who had participated in one of the four workshops associated with the project.

Follow-up contact with participants. During late fall and early winter participants in the first Knoxville workshop were contacted by mail and later by phone to ascertain (1) what progress they had made in implementing the career education plans they had made during the workshop, and (2) what assistance the faculty team might provide in this endeavor. A brief summary of these follow-up interviews appears in Appendix C.

Most frequently the workshop participants requested additional lesson planning ideas and a listing of recommended commercial career materials. The annotated bibliography described above was developed as one response to such requests for materials.

The librarian at a school in Knox County requested an in-service training program for the faculty at her school. On December 5, 1978, two members of the UTK team provided a brief introduction to career education and illustrated the infusion process for the faculty at that school.

In early May 1979 participants in both the Knoxville summer workshop and the workshop held in Cleveland were surveyed by mail (which was supplemented with telephone follow-up) to make a year's-end assessment of career education utilization in the schools. In addition, a series of questions was asked to determine (1) how supportive the principal had been of the career education process in the schools, and (2) how important to that support workshop participation was perceived to be.

It was encouraging to the faculty team to find that all participants who responded to this survey had used their implementation plans during the 1978-79 school year and planned to use career education more extensively in 1979-80. As was expected, most participants saw principals' support for career education as vital to the success of a comprehensive implementation plan (two-thirds said such support was "very important"). And all felt that it was important for the principal to attend a workshop such as the one presented in this project to gain first-hand knowledge of the career education concept. They felt that participation in the training program would strengthen the commitment of the administrator to support a career education program in the school. This information from participants provided strong support for inclusion of the principal as part of the team to be trained in the workshops.

## Information for Others

Letter to superintendents. During the last quarter of the project, following the Cleveland workshop and during the second Knoxville workshop, the UTK faculty team finally gained a feeling of confidence that they (1) knew the kinds of information and materials that were needed by public school personnel in Tennessee to stimulate interest in implementing career education, and (2) had collected enough of this illustrative material to be able to make it available to non-participating schools throughout the State. Accordingly, a letter was developed and sent to superintendents of all school systems in the State to make these officials aware of the workshop project and to encourage them to identify principals in their systems who would be interested in acquiring some of the workshop materials.

The superintendents' letter included a request form (see Appendix C) which superintendents were asked to duplicate and distribute to interested principals. The form provided an opportunity for each principal to order the Annotated Bibliography of Commercial Career Education Materials and/or sets of lesson-planning ideas in any subject area at any grade level.

As requests from principals began to arrive at the project office, sets of lesson plans for various subjects at various grade levels were developed. Sources for these lesson plans included the implementation plans of workshop participants, the Mini-Library of the National Center for Career Education at Missoula, Montana, materials developed by the Illinois State Department of Education, and a series prepared by the Jefferson County Public Schools in Louisville, Kentucky.

Requests for materials were received from approximately 65 schools. Along with each package of materials sent out, a postage-paid reply card was included to permit those who received the career education information to evaluate its potential or actual usefulness. Since most of these materials were ordered at the end of the school year and delivered during the summer vacation period, many of the envelopes were not opened until the beginning of the following school year. Thus the reply cards which would have permitted an evaluation of the materials by users were not returned in sufficient quantities to make a meaningful assessment prior to the project ending date. However, more than 95 percent of the cards that were returned contained positive reactions to the materials and their usefulness.

Memorandum to other colleges. In May 1979 the Dean of the College of Education, UTK, sent a memorandum to the heads of all teacher preparation programs at institutions of higher education in Tennessee. The memo summarized the career education training project and offered the teacher educators an opportunity to order the following materials from the UTK career education team: (1) summaries of course modules developed by team members, (2) the Annotated Bibliography of Commercial Career Education Materials, and (3) some sample lesson plans illustrating infusion of career education in various academic subjects at several grade levels. Twelve of the thirty-three department heads to whom the memo was addressed responded by requesting the materials listed, and these materials were mailed during the month of June.

Unsolicited requests. During 1978-79 approximately a dozen individuals in the State who had neither participated in a workshop nor received a letter concerning the project called or wrote to request project materials. Some of these individuals had heard a report from the project director at one of the conferences which she addressed. Others learned about the project from acquaintances who had attended one of the workshops. Five of these unsolicited requests were for copies of the newsletter. The other requests were for lesson-planning ideas. All materials requested in this manner were mailed promptly to those making the requests.

Requests from outside Tennessee. During 1978-79 project information and materials were exchanged with other on-going career education projects in (1) Louisville, Kentucky, (2) Cashmere, Washington, (3) Michigan State University, and (4) the Northwest Connection in Portland, Oregon.

Sample materials were sent to Thomas Buffington and Associates in Washington for inclusion in a catalog of materials from all projects funded by the Office of Career Education in 1978-79. Sample materials also were sent to OCE projects in Mobile, Alabama, and Columbia, Missouri, and to the National Council for the Social Studies which has project headquarters at the University of Georgia at Athens.

Papers presented and articles published. During the project year the following papers and articles were developed and presented or published by members of the UTK faculty team:

Banta, Trudy W. "Career Education: The Work Ethic and Social Studies," in Lawrence O. Haaby, ed., Social Studies Laboratories for Learning. Knoxville: University of Tennessee, College of Education, Dept. of Curriculum and Instruction, 1979, 101-108.

________. "Using Career Education as a Selection Criterion for Social Studies Texts." Paper presented at a workshop for social studies teachers conducted by the UTK Department of Curriculum and Instruction in Knoxville, November 10, 1978.

________, Donald L. Bratcher, and William C. Aiken. "Career Development for Secondary Youth in a Church Setting." Journal of Career Education, 5:179-184, March 1979.

________ and Lee Murphy. Tennessee's Project RETOOL: Continuing Education with the theme "Career Education for the Handicapped." The Educational Catalyst (in press), 1979.

Murphy, Lee and Trudy W. Banta. Career Education: Implications for Preparing Teachers of the Handicapped. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 11, 1979.

Turner, Thomas N. and Trudy W. Banta. "Career Education: A Force for Curriculum Change in Tennessee." The TASCD 78 Journal, 5:20-23, Fall 1978.

## SUMMARY

Needs assessments associated with the development in 1978 of Tennessee's State Plan for Career Education provided evidence that:

(1) a comprehensive K-12 career education program should be developed in the public schools of the State in order to meet students' career development needs, and

(2) the most important prerequisite for implementing career education in Tennessee's schools was in-service training for school professionals.

These findings prompted seven professors representing five departments in the College of Education at the University of Tennessee, Knoxville (UTK) to develop a career education training program for school-based teams composed of the principal, a counselor, and two teachers.

### In-Service Workshops

With funding from the Office of Career Education the UTK faculty team provided career education training for 300 in-service professionals in four workshops conducted during 1978-79. Two workshops were held on the UTK campus; the first began in July 1978 and the second in April 1979. A one-day workshop was conducted for Memphis City Schools personnel in November 1978. A fourth workshop was held in Cleveland, Tennessee, in March 1979. Both Knoxville workshops and the one in Cleveland provided tuition-free academic credit for participants.

During the workshops for which credit was awarded, each school-based team developed a local implementation plan which included:

(1) a definition of career education,

(2) a description of the school setting and rationale for career education in that setting,

(3) a student needs assessment designed to provide direction for the school's career education program,

(4) school-wide age appropriate career education goals based on the needs identified via the student survey in (3),

(5) specification of objectives for principal, counselor, and teachers in implementing the school goals (teachers developed lesson plans integrating career education objectives with their own subject matter objectives), and

(6) a plan for evaluating principal, counselor, and teacher progress toward achieving the objectives specified in (5).

## Follow-Up Assistance for Workshop Participants

The following activities and materials were designed by the UTK faculty team to provide follow-up assistance for workshop participants:

(1) two surveys conducted by mail and telephone to assess participants' progress and needs in implementing local action plans;

(2) response to participants' requests for (a) specific lesson planning ideas and other resource materials, and (b) in-service programs for their faculties;

(3) monthly newsletters which contained infusion ideas for teachers and information about new career education materials and recent developments in career education at the State and national levels; and

(4) an Annotated Bibliography of Commercial Career Education Materials.

## Dissemination Activities

Throughout the training project efforts were made to disseminate (1) information about the workshops to potential participants, and (2) descriptions of project materials to potential users.

In June 1978 a letter describing the summer workshop was mailed to every public school principal in Tennessee. A press release was prepared for use in newspapers throughout the State. Curriculum specialists in career education who were employed in the nine district offices of the State Department of Education were asked to encourage school personnel in their districts to attend the summer workshop.

At the time the training project was initiated, UTK was the only teacher preparation institution in Tennessee that had developed on-going course offerings in career education. Consequently, the project was viewed as a potential example for other education departments in the State. In June 1978 the Dean of the College of Education at UTK sent a memo to the other heads of education departments in Tennessee's colleges and universities inviting the participation of interested faculty members in the UTK summer workshop. Representatives of two of the thirty-three institutions contacted actually attended the workshop.

Due principally to the timing of the notice for principals concerning the summer workshop, only 40 individuals, not the 108 anticipated, were able to attend. Consequently, the possibility of holding additional workshops was explored. On November 18 a one-day workshop was held for school-based teams from the Memphis City Schools. And in response to indications of interest expressed by principals in East Tennessee when they received publicity on additional workshops, a third training program was conducted in Cleveland, Tennessee, on the five Saturdays in March 1979, and a fourth workshop took place in Knoxville during April-May. In all, 225 teachers, 35 counselors, and 40 administrators received career education training.

In May 1979 two efforts were initiated to provide information about products of the training project to potential users of these products:

(1) A letter was sent to each of the 146 school superintendents in Tennessee suggesting that they provide a "Request for Career Education Materials" form to interested principals in their system so that those principals might order:

  (a) brief summaries of the six career education curriculum modules prepared by the UTK faculty team,

  (b) an Annotated Bibliography of Commercial Career Education Materials developed by the team, and

  (c) lesson plans for infusing career education into any course at any grade level.

(2) The Dean of the College of Education, UTK, sent a memo to the other heads of teacher preparation programs in Tennessee suggesting that interested faculty members be encouraged to request any of the materials listed in (1) above.

Approximately 65 principals, representing 18 school systems, requested lesson planning ideas for 15 subjects at various grade levels. Summaries of the curriculum modules and the Annotated Bibliography were sent with all orders for infusion plans. Requests for all available materials were received from 12 teacher preparation institutions.

## Evaluation

The instrument "Pre-Workshop Needs Assessment" was administered prior to the workshop to all students in the three credit-bearing workshops. Responses such as the following alerted the workshop team that instruction should begin at an elementary level:

- Fewer than 15 percent of the workshop participants represented schools or school systems that had adopted a definition of career education.

- 90 percent said they would find it "difficult" to explain "infusion" in relation to career education.

- Three-fourths were "not at all familiar" with the "historical development of the career education concept."

- 95 percent had little familiarity with career education materials.

A "Pre/Post Test for General Introduction to Career Education" was administered prior to instruction, and again at the last workshop session, to determine how much workshop participants' general knowledge of career education concepts changed as a result of instruction given in each of the three credit-bearing workshops. In all three cases a t test for related means indicated that the post-test mean score was significantly higher than the pre-test mean. However, an item analysis conducted by a measurement specialist external to the project suggested that the test contained technical deficiencies.

Participants in the credit-bearing workshops were asked to use a 4-point Likert scale to indicate their agreement or disagreement with 31 statements about career education. This instrument, "Attitudes Toward Career Education Concepts" was given at the first workshop session, and again at the last session. A t test for related measures indicated that when all workshop participants' responses were combined, attitudinal changes significant at the .01 level took place following instruction on 29 of the 31 items.

Participant responses to items in an end-of-workshop questionnaire entitled "Career Education Workshop Evaluation" provided evidence that all process objectives for the workshop had been achieved to the extent specified in the pre-project evaluation design.

- 97 percent of the participants in the Knoxville summer workshop (the only group to be asked this question) felt the training project had effectively illustrated use of an interdisciplinary team to present the workshop curriculum.
- 90 percent of the participants in the workshops held in Cleveland, Memphis, and Knoxville (summer) said the "overall quality of instruction" received in the workshop was "good" or "excellent."
- 94 percent of the Cleveland, Memphis, and Knoxville summer participants rated as "good" or "excellent" the "overall quality of the learning materials" they received during the workshop.

(Note: Responses of the Knoxville spring workshop participants were substantially more negative than those of participants in the other three workshops primarily due to the fact that so many teams registered near the deadline for application that a suitable classroom for 108 individuals could not be obtained. The poor facility which was used to house the group marred participants' perceptions of all aspects of the program.)

- 100 percent of the Knoxville summer participants (the only group questioned) said that the six curriculum modules developed by the UTK faculty team had been satisfactorily integrated to form a comprehensive training program.
- Overall quality of the six curriculum modules was rated by all participants in the range 3.02 to 3.38 on a 4-point scale (4 = excellent, 3 = good, 2 = fair, 1 = poor.)

All participants in the three workshops offered for credit completed individual and/or team plans for local implementation of career education. At least two instructors evaluated each plan, and most were considered excellent: 85 percent of the plans were given an A grade. In May 1979 a survey of workshop participants who had had sufficient time to make use of their training revealed that all had made some use of the plans developed during the workshop. Twenty-two percent said they had used their plans "extensively." All indicated that they would make more use of their plans during the 1979-80 academic year.

## Suggested Improvements

The first workshop incorporated general sessions, during which the introduction and community resources modules were presented to all participants; and separate sessions, for consideration of the unique roles of principals, counselors, and teachers. In response to feelings expressed by participants that the UTK staff needed to model teamwork more effectively, the faculty team changed the format for the remaining workshops. All modules were presented to all participants, and the unit for small group discussion was the school-based team. Under the second organizational pattern participants seemed to appreciate the opportunity to learn about the roles of all professionals on the career education team. In addition, the work done in school-based teams was valuable, both in terms of promoting the team concept and in accomplishing the task of designing a local implementation plan.

While both professors and participants generally approved of the workshop format piloted in Cleveland, participant suggestions on the "Career Education Workshop Evaluation" form indicated that the following changes would further improve the workshop:

(1) Professors should replace some of their lectures with activities for participants.

(2) Videotapes and role-playing should be used to illustrate infusion of career education in lesson plans in a variety of subjects.

(3) There should be at least one two-hour session for each group of professionals--principals, counselors, teachers--to meet separately to consider specialized aspects of their role on the career education team.

## REFERENCES

Banta, Trudy W. Tennessee Career Education Needs Assessment. Nashville: Tennessee State Department of Education, April 1977. ERIC Document # ED 146383.

Banta, Trudy W. and others. Career Education: A Framework for Teamwork. Knoxville: Bureau of Educational Research and Service, The University of Tennessee, 1978. ERIC Document # ED 153013.

Interinstitutional Consortium for Career Education. University Staff Development in Career Education. Salem, Oregon, 1977.

# APPENDIX A

## SUMMARIES OF UTK CAREER EDUCATION CURRICULUM MODULES

A Team Approach to Career Education--Summaries of Instructional Modules

Learner Outcome Objectives, Instructional Strategies, and References for the Six Curriculum Modules

# A TEAM APPROACH TO CAREER EDUCATION

## Summaries of Instructional Modules Presently Used By Members of the Faculty Career Education Team At the University of Tennessee, Knoxville

"Career Education: A Word of Introduction"
Dr. Trudy W. Banta, Associate Professor
Bureau of Educational Research and Service

"The Teacher's Role in Career Education"
Dr. Thomas N. Turner, Associate Professor
Department of Curriculum and Instruction

"Role and Function of Counselors in a Team Approach to Career Development"
Dr. Siegfried C. Dietz, Professor and
Dr. Mark A. Hector, Associate Professor
Department of Educational Psychology and Guidance

"Building-Level Administration Functions As They Relate to a Program of Career Education"
Dr. George W. Harris, Jr., Associate Professor
Department of Educational Administration and Supervision

"Community Resources"
Dr. Robert R. Hanson, Associate Professor
Department of Vocational-Technical Education

"Career Education for the Handicapped"
Dr. W. Jean Schindler, Associate Professor
Department of Special Education and Rehabilitation

May
1979

Bureau of Educational Research and Service
2046 Terrace Avenue
Knoxville, TN 37916

# CAREER EDUCATION: A WORD OF INTRODUCTION

Trudy W. Banta

CAREER EDUCATION is NOT a new body of curriculum content to be taught in a separate course at the secondary level. Instead it is an instructional strategy that can be used to teach any subject at any grade level. It employs career illustrations to show how a subject may be used in the world outside the classroom in one's life roles as family member, citizen, paid worker or volunteer, or participant in leisure activities.

CAREER EDUCATION is NOT vocational education, though it includes specific skill training at the secondary and/or postsecondary level. Career education begins in the pre-school years and should be continued by the public schools from the kindergarten level through 12th grade. It involves:

1) learning about SELF--interests, values, capabilities and limitations;
2) obtaining information about CAREERS as an integral part of studying one's school subjects;
3) integrating knowledge of self with knowledge of careers to make realistic choices about a career and the preparation needed to embark on that career.

Career education as an instructional strategy was given national prominence in 1971 by the Commissioner of Education Sidney Marland who announced that it would be a priority of his administration. But as early as 1920 John Dewey said in his Democracy and Education that "education through occupations...is more conducive to learning than any other method" and that schools should utilize "the factors of industry to make school life more active, more full of immediate meaning, more connected with out-of-school experience."

Research and evaluation studies have shown that career education used as an instructional strategy INCREASES STUDENT MOTIVATION TO LEARN and can INCREASE ACHIEVEMENT in the basic skills of reading and arithmetic. Career education activities forge a stronger link between community and school by bringing representatives of the community into the school to talk with students about their careers, and by taking students into the community to see how work and leisure activities are performed there.

A SCHOOL PLAN FOR CAREER EDUCATION should include:

1) an assessment of student career education needs;
2) a set of overall school career education goals based on these student needs;
3) teacher-made plans for weaving the goals, through instructional activities, into every subject at every grade level;
4) provisions for utilizing community resources in the program; and
5) support from the principal and school counselor in providing instructional materials and coordinating the linkage with the community.

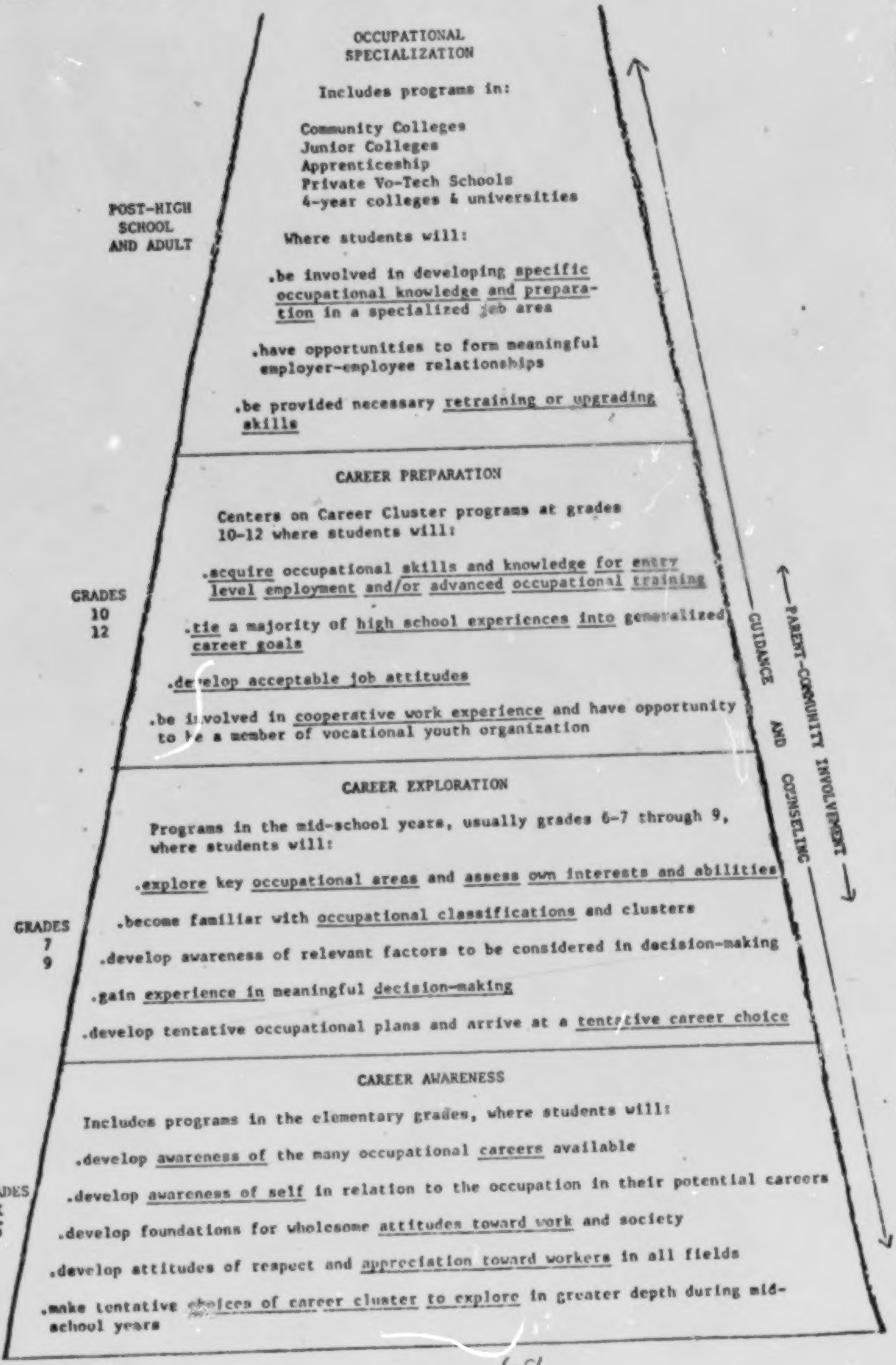
The Developmental Career Ladder pictured on the following page describes the STAGES OF CAREER EDUCATION:

- at the elementary level awareness of self and of the vast variety of available careers;
- in the middle years exploration, through hands-on activities, of careers which seem to fit with one's interests and abilities;
- at the secondary level preparation for entry level employment and/or advanced occupational training;
- specialization, which takes place during the adult years.

The process is a continuous one with opportunities for individuals to recycle through the various stages at one or more points during their life-time as they attempt to cope with the rapid pace of technological change which makes some occupations obsolete and creates others.

## FIGURE 1: THE DEVELOPMENTAL CAREER LADDER

Career Education is based upon a model which provides for comprehensive program development at the elementary, mid-school, secondary and post high school levels. The articulated continuous curriculum design is based upon a strong emphasis on guidance and counseling and parent-community involvement at every level, and can be represented as:



**OCCUPATIONAL SPECIALIZATION**

Includes programs in:

Community Colleges
Junior Colleges
Apprenticeship
Private Vo-Tech Schools
4-year colleges & universities

Where students will:

- be involved in developing specific occupational knowledge and preparation in a specialized job area
- have opportunities to form meaningful employer-employee relationships
- be provided necessary retraining or upgrading skills

**CAREER PREPARATION**

Centers on Career Cluster programs at grades 10-12 where students will:

- acquire occupational skills and knowledge for entry level employment and/or advanced occupational training
- tie a majority of high school experiences into generalized career goals
- develop acceptable job attitudes
- be involved in cooperative work experience and have opportunity to be a member of vocational youth organization

**CAREER EXPLORATION**

Programs in the mid-school years, usually grades 6-7 through 9, where students will:

- explore key occupational areas and assess own interests and abilities
- become familiar with occupational classifications and clusters
- develop awareness of relevant factors to be considered in decision-making
- gain experience in meaningful decision-making
- develop tentative occupational plans and arrive at a tentative career choice

**CAREER AWARENESS**

Includes programs in the elementary grades, where students will:

- develop awareness of the many occupational careers available
- develop awareness of self in relation to the occupation in their potential careers
- develop foundations for wholesome attitudes toward work and society
- develop attitudes of respect and appreciation toward workers in all fields
- make tentative choices of career cluster to explore in greater depth during mid-school years

# THE TEACHER'S ROLE IN CAREER EDUCATION

## (SUMMARY OF INFUSION MODULE)

T. N. Turner

This module is concerned with the "how to" of the teaching process of career education. It attempts to address the question of how teachers can effectively integrate career education into existing teaching-learning experiences.

The process of the module includes an attempt to convince teachers that infusion can be achieved, to outline the conditions and steps in infusion, and to demonstrate or model infused activities. There is also an effort to guide teachers to some good sources of activity ideas.

Examples of models of activities are built around five different types of infusion techniques. These are as follows:

1. Values clarification about career related decisions.
2. Highlighting career content already present in content and materials of academic subjects.
3. Identifying focusing questions to relate academic content to courses .
4. Using career applicationsand examples as the learning tasks.
5. Providing models of careers within a teacher's own subject area interest.

Elements of infusion within these techniques are identified. Among those analyzed are:

1. Perceived/felt need.
2. Perceived/recognized opportunity.
3. Analyzed mutual benefit to academic and career goals.
4. Planning of systematic, articulated experiences.
5. Continuous evaluation.

# ROLE AND FUNCTION OF COUNSELORS IN A TEAM APPROACH TO CAREER DEVELOPMENT

Siegfried C. Dietz and Mark A. Hector

The first role of the counselor in a career education program is to help classroom teachers emphasize career implications in their courses. This role, which is essentially one of consultation, implies that the counselor is involved in deciding how careers are related to the subject matter taught in the classroom. For example, counselors can gather and organize classroom materials that tie the subject matter to potential careers. Teachers in Tennessee can increase the relevance of the subject matter they teach (e.g., mathematics, English, etc.) by relating it to careers found in this region of the country such as energy production (e.g., coal mining, nuclear power, etc.) and tourism. Students are then better able to relate what they are learning to possible future careers.

A second role, which involves consultation and coordination, helps to emphasize vocational skill training in the formal education program. Academic teachers need to understand that vocational education is not inferior education, but a different kind of education. As a consultant and coordinator, the counselor can serve to close the gap that often exists between these two approaches to education. Vocational-technical training schools in Tennessee have been developing and expanding rapidly during the past ten years. The effective career guidance counselor needs to maintain a close contact with the programs and course offerings in local vocational-technical training schools. The only source of information about these schools for secondary school students is often the school counselor.

A third role entails helping the business-labor-industry community engage in the career development education program. Counselors can usefully serve as liaisons between this group and the school community.

The fourth role identified by Dr. Kenneth Hoyt, Director of the U.S. Office of Career Education, involves helping the home and family to participate in the career development education program. In the case of Tennessee where there is no comprehensive program in career development education, this role is essentially one of informing parents about the program and in some cases helping to change negative parental attitudes.

A fifth role that seems important enough to be mentioned separately is that of counseling. As students develop regarding career awareness, exploration, and preparation, they will need to evaluate alternatives, obtain more information, and make decisions, among many other steps. Taking these steps can be facilitated through the help of a counselor. Both counselors in training and counselors on the job need to be aware of these steps in career development. The Department of Educational Psychology and Guidance of The University of Tennessee offers courses that focus on these concepts, both within the regular training program and through evening school for counselors on the job. Other counselor education departments within the state offer similar programs.

# A SUMMARY OF BUILDING-LEVEL ADMINISTRATION FUNCTIONS AS THEY RELATE TO A PROGRAM OF CAREER EDUCATION

George W. Harris, Jr.

The principal is responsible for all activities in his/her building. However, the main emphasis for the above-mentioned responsibility is focused upon the instructional phase of the school's career education program. The establishment of community needs concerning careers is vital to the establishment of building-level career objectives. Such action allows for input from the following groups:

1. Community persons
2. Business
3. Industry
4. Labor unions
5. Teachers
6. Teacher organizations
7. Students
8. Guidance Counselor
9. School Psychologist

Input from the above-mentioned segments plus administrative perimeters created by the federal government, the state, the board of education, and central office administration will provide the guidance needed in the school's career education program.

Building level tasks concerned with a program of career education should be:

1. The establishment of specific building-level policy.
2. Building-level orientation and periodic in-service training of the career education team.
3. Integration of career education with the existing school curriculum.
4. Orientation of building-level secretarial support staff with career education clerical matters.
5. Orientation of the community.
6. Orientation of the business, industry, and labor communities.
7. Formulation of a career education coordinating and planning committee.
8. Acquaintance of the entire building-level staff with the goals of the career education program.
9. Coordination with the building-level career education team.
10. Development of an evaluation system for building-level use.
11. Supervision of the periodic evaluation process at building-level.
12. Coordination with the district-level evaluation process for career education.
13. Provision of evidence and coordination with central office for program alterations (as a result of evaluation findings).
14. Coordination with central office career education personnel.

In addition to the above-mentioned tasks regarding the building-level instructional effort (of the career education program), there must be a program of logistical support. The support effort will involve the following:

1. Logistics
    a. Supplies
    b. Equipment

2. Personnel Needs
    a. Hiring
    b. Firing
    c. Transferring
    d. Supervising
    e. Evaluating
    f. Providing job descriptions
    g. Organization

3. Fiscal Requirements
    a. Budgetary matters
    b. Accounting
    c. Auditing
    d. Financial support

4. Time
    a. Projected
    b. Current Phase
    c. Elapsed

The instructional and logistical support phases are part of a large share of the career education effort at building-level. However, the everyday troubleshooting of problems in the career education process will consume a considerable amount of time. The best defense in such matters is policy. Policy from the board of education and from the building-level bestows upon the principal a legal foundation from which to operate.

In order that a program of career education be successful, there must be a more than adequate operation of the instructional and logistical support phase. Finally, a considerable amount of cooperation is needed between the principal and central office.

# COMMUNITY RESOURCES

Robert R. Hanson

The module for utilizing community resources provides suggestions for gaining access to one of the most lucrative, relatively untapped resources available to the school and its students. This module provides a model questionnaire/format that may be used to gather data from business, industry and other cummunity resources that may become useful in selecting resources, storing information and retrieving that information at the appropriate time.

The greatest single problem that keeps schools and community resources from working together is a natural isolation that has been created since many teachers have limited experience outside of education. Teachers, as a result, are rather ill-equipped to create the link with the expertise within the community outside of the school.

The decade of the 60's was a time students were said to be in search of the relevance of what they were being taught in the schools, the attempt to determine if there was a link between the school and the real world. Students send clear messages at times and it is time education reacts more fully to their concern. The community can provide a positive means to close this gap.

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COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

DEPARTMENT OF SPECIAL EDUCATION
AND REHABILITATION

TELEPHONE: AREA CODE 615-974-2321

## CAREER EDUCATION FOR THE HANDICAPPED

W. Jean Schindler

The career education module in Special Education was developed to cover several basic areas. These areas include the following:

1. An overview of various exceptionalities and their basic career problems.
2. The influence of Public Law 94-142, Section 504 and the State Law 839 on Career Education for the exceptional student; emphasis on the Individualized Educational Plan.
3. Plan and implement activities within the curriculum to develop career awareness for the exceptional students.
4. Plan and implement activities within the curriculum to develop prevocational skills for the exceptional students.
5. Identification of vocational stereo-types and the enhancement of careers which are attractive to and for exceptional persons.

## LEARNER OUTCOME OBJECTIVES FOR THE MODULE "INTRODUCTION TO CAREER EDUCATION"

(For Principals, Counselors and Teachers)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| 1. Identify at least five antecedent societal conditions which created a need for the emergence of a curriculum thrust such as career education in 1970. | 1. Instructor lecture and reading by participants of position papers by Edwin Herr. |
| 2. Write a definition of career education that is acceptable to Workshop instructors. | 2. Instructor lecture and reading of references such as Hoyt, and Goldhammer and Taylor. Participants will meet in school-based teams to derive a definition of career education for their own settings. |
| 3. Define career development and career preparation. | 3. Instructor lecture and reading by participants of Career Education in Michigan--Module II. |
| 4. Identify and explain the four levels of the Developmental Career Ladder (i.e., awareness, exploration, preparation, specialization). | 4. Instructor lecture illustrated with transpariences and handouts for participants. |
| 5. Express at least five generalizations about career education, e.g., career education is for all students and should be infused into every subject at every grade level, vocational education is one component of career education, career education does not conflict with other educational objectives but enhances motivation to learn by relating school learning to its uses in the world outside the classroom, career education brings parents and other community representatives into the education process. | 5. Lecture, participants' discussion, and reading of basic career education texts such as those by Hoyt, Marland, and Jesser. |
| 6. Trace briefly the historical development of the career education concept, identifying in the discussion at least 5 specific factors (e.g., legislative acts) that have influenced that development. | 6. Illustrated lecture based on background material obtained from Edwin Herr's position papers and the Ohio State training materials. |
| 7. Identify and characterize at least four national and/or state career education models. | 7. Illustrated lecture based on background material obtained from Edwin Herr's position papers and the Ohio State training materials. |

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| 8. Identify at least five authors who have shaped the development of career education theory and practice. | 8. Instructor lecture and participants' reading of texts such as Hoyt, Marland, and Jesser. |
| 9. Develop a plan, acceptable to workshop instructors, for initiating a career education program in the school utilizing the teacher-counselor-principal team trained in the workshop. | 9. Illustrated lecture and group work by participants in school-based teams. |

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10. Career Education Series (Cassette tapes). Salt Lake City: Olympus.

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13. Career Education Workshop Leader's Guide (Project staff director Elvis Arterbury) Texas: Partners in Career Education. 1977.

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### Staff Development Materials Utilized in Module Construction

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"A Conceptual Base for Career Education" - 1975

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Ohio State University. The Center for Vocational Education. Columbus, Ohio: 1974-75. Staff Development in Career Education for the Elementary School (Seven Modules); Staff Development Program for the Implementation of Career Education (Teacher's Guides) - Group Approach; Staff Development Guidelines and Procedures for Career Education; An Orientation to Career Education - Group Approach (Six Modules); The Administration of Career Education (Eight Modules); Teachers Guides (Thirty); The Community and School-Based Career Education (Six Modules).

Oregon Interinstitutional Consortium for Career Education. Salem, Oregon: 1976-77. Career Education in Elementary Teacher Education (1976)
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## LEARNER OUTCOME OBJECTIVES FOR THE MODULE "INFUSING CAREER EDUCATION INTO THE SCHOOL CURRICULUM"
(For Teachers)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| Following completion of the module "Infusing Career Education into the School Curriculum" teachers should be able to complete the following tasks: | |
| 1. Develop a working concept of infusion so that they may recognize possible career education program elements in all academic subjects. | 1. The instructor will present the concept of infusion as identified and defined and illustrated in the literature of the University of Michigan in-service sessions conducted by Dr. Richard Gardner, for the Career Education Planning Committee at UTK, 1975-76.<br>Model infusion lesson plans developed for UTK Career Education monograph, Spring 1978, will be presented and discussed. |
| 2. Participate in group discussions listing specific opportunities within each content area for infusion of career education, incorporating the concept of career clusters. | 2. Participants will be involved in small group, limited-task problem solving groups to identify lists of specific opportunities for infusion within each subject area. |
| 3. Develop and share at least 5 activity ideas and plans for lessons involving infusion of career education into specific content subjects. | 3. In demonstration-work sessions, the instructor will present stimuli in the form of model activities and participants will develop involvement activities appropriate to their own subjects.<br>A newsletter type of publication will be compiled and distributed sharing the ideas of participants. |
| 4. Develop specific check lists of criteria to be used in evaluating prepared career education materials for local use. Criteria developed will reflect emphasis on such factors as equal opportunity, child development characteristics, learning abilities of students, and current content regarding careers. | 4. In groups, participants will develop and apply check lists of desirable qualities to career education materials. |

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| 5. Develop a series of model units appropriate to local community, adapting and creating based on exposure to units developed in other localities. | 5. Participants will survey model units from materials developed in other states during the workshop and be led in preliminary planning of locally appropriate units. |

## References for the Module
## "Infusing Career Education into the School Curriculum"

Career Development Education Planning Model K-11. Juneau, Alaska, Alaska State Department of Education.

Career Development Field Trips. Petersburg, Virginia. Petersburg Public Schools.

Career Development for Children Project: Final Report. Carbondale, Illinois. Department of Occupational Education, Southern Illinois University at Carbondale. 1973.

Career Development Resource Materials K-6. St. Paul, Minnesota. Division of Vocational Education, Pupil Personnel Service Section, Minnesota Department of Education. 1972.

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Career Education, An Idea Book for English Teachers. Montpelier, Vermont. Vermont Department of Education.

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Career Education in the Elementary School, St. Paul Minnesota. Minnesota Department of Education. 1974.

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Community Careers - Second Grade Activities. Union Grove, Wisconsin. Union Grove Graded School. 1971.

A Conceptual Framework for a Career Development Continuum K-14 for Hawaii's Schools. Honolulu, Hawaii. Hawaii Career Development Continuum Project, Hawaii State Department of Education. Materials available only from ERIC Document Reproduction Service on Vocation and Technical Education.

Curriculum Guide for Career Development, (Grades 6-8). Union Grove, Wisconsin. Union Grove Area Schools. 1972.

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eigh County Research and Development Project in Career Education: Curriculum Units Kindergarten and K-4 Combined Units. Beckley, West Virginia. Raleigh County Schools.

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## LEARNER OUTCOME OBJECTIVES FOR THE MODULE "CAREER EDUCATION FOR THE HANDICAPPED"

(Integrated into Preceding Modules for Teachers and Counselors)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| Following completion of the module "Career Education for the Handicapped" workshop participants should be able to complete the following tasks: | |
| 1. Identify and classify information about careers for people with varying abilities as it appears in current curriculum materials for elementary school children. | 1. Participants will list careers as they appear in traditional reading, social studies and other educational materials.<br>Participants will separate careers in above list into sections as those obtainable and not obtainable for persons with varying degrees of handicaps and various types of handicaps. |
| 2. Identify careers and sources of career information that are not contained in the traditional curriculum materials given to elementary school children. | 2. Participants will develop lists of careers which are not in traditional curriculum materials and which need to be emphasized because they are obtainable career goals for persons with varying abilities.<br>Participants will survey area libraries, resource centers, etc. for published materials describing careers in the above lists. |
| 3. Define currently used terms such as "handicapping conditions" and "mainstreaming" and identify the relationships between specific handicaps and career possibilities. | 3. Instructor will present, and participants discuss, distinct categories of disabilities, (mental, physical, and/or emotional). Instructor presentation and discussion of delivery systems for integrating handicapped children into public school classrooms, and presentation of the limitations placed on children depending on the severity of their involvement in a disability. Use films to depict these limitations. Instructor presentation of possible problem areas in regard to mainstreaming. Discussion of participants' experiences in this regard. Compile a list of handicaps - the problems associated with a specific handicap - and possible approaches for mainstreaming using career education as a vehicle for integration. |

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| 4. Identify and clarify personally held attitudes, beliefs and values about career development for handicapped children and share these attitudes, beliefs, and values with other participants. | 4. The instructor will administer Attitude Survey form. These will be exchanged among participants, who will share findings and record percentages in each response category. |

Vocational Education for Students with Special Needs: An Administrator's Handbook. By Myra Altfest and Nancy Hartley, Eds.; 1975, 56 p.

Vocational Education for Students with Special Needs: A Teachers' Handbook. By Myra Altfest, Ed.; 1975, 120 p.

Professional Development Program for Vocational Educators of Handicapped Students. Final Report. By Marc Hull and William Halloran; 1974, 214 p.

Handbook on Implementing Vocational Education Special Needs Programs. Div. of Vocational Education and Community Colleges, Alabama State Dept. of Education; 1975, 34 p.

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Vocational Training and Job Placement of the Mentally Retarded: An Annotated Bibliography. By Christopher W. Debusk and Vincent P. Luchsinger, Comps. Texas Tech University; 1974, 200 p.

Modifying Regular Programs and Developing Curriculum Materials for the Vocational Education of the Handicapped. Progress Report, 1975. By Roger H. Lambert et al., Center for Studies in Vocational and Technical Education, University of Wisconsin; 1975, 74 p.

An Assessment of Vocational Education Programs for the Handicapped Under Part B of the 1968 Amendments to the Vocational Education Act. Final Report. By John J. Walsh et al., Olympus Research Corp.; 1974, 294 p.

Innovations in Vocational Education: Meeting the Needs of the Handicapped--An Emerging Responsibility. By Jack R. Clarcq and Edward A. Maruggi; 1975, 12 p.

Vocational Education for the Handicapped: Assistance in Initiating or Strengthening Vocational Programs for Handicapped Youth. By Gregory Buontempo et al., New Jersey State Department of Education; 1974, 7 p.

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Criteria Integration of EMR Pupils into Vocational Classes. Summer Workshops, 1975. Exemplary Career Education Project, Springfield Public Schools, 525 Mill Street, Springfield, Oregon, 97477. 1975. (CE7502755).

Motel Career - Special Education. Hazard High School, Hazard Independent Schools, Hazard, Kentucky. July, 1974. 7 p. (CE7603940).

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# LEARNER OUTCOME OBJECTIVES FOR THE MODULE "THE COUNSELOR'S ROLE IN CAREER EDUCATION"

(For Counselors)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| Following completion of the Counselor Education Module of the Career Education Workshop Counselors should be able to complete the following tasks: | |
| 1. Develop human relations skills and group counseling techniques to assist students with self-awareness and career exploration. | 1. The instructors will lead discussion of the use of group counseling techniques for career education study and how, if effectively utilized, the techniques can assist students (K-12) to develop self-awareness skills.*<br>Participants will observe activities/functions in a career counseling center to identify skills which enhance K-12 students' career awareness, career exploration, and career preparation experiences. |
| 2. Identify equality concepts and roles in career education as they relate to past and present race and sex stereotyping, trends among cultures, and trends in the world of work. | 2. The instructors will review/discuss sociological, philosophical, and historical literature sources to identify and trace present and past sex role trends in the world of work.<br>The participants will review/discuss racial and sex-role stereotyping of careers in instructional materials and recommend ways to alleviate this concern. They will discuss the effects that stereotyping in instructional materials may have on K-12 students' career choices. |
| 3. Develop skills and knowledge needed to act as a liaison and resource person to the community to keep the community informed of new developments in career education. | 3. Participants will assume roles of resource and liaison persons; demonstrate how those persons keep the community informed about career education and how they can utilize community suggestions for implementing career education. |

*The primary reference for this section is McKinney, L. A. et al. Career Education Personnel Development - Ideas for University Planning. Columbus: The Center for Vocational Education, The Ohio State University, 1975.

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| 4. Plan/implement learning activities which involve problem solving and decision making skills as they relate to career choice and career preparation. | 4. Participants will plan/implement learning activities which utilize small groups where students (K-12) experience making a group decision regarding some work-related problem situation.<br>Participants will simulate worker conflict situations and apply skills/guidelines that will reduce worker alienation.<br>Participants will analyze several given comprehensive career education evaluation systems for the purpose of identifying and understanding the basic components of such systems.<br>The group will prepare a list of basic components of comprehensive career education evaluation systems; discuss/defend the relevance of each identified component to evaluation. |

## BIBLIOGRAPHY FOR THE MODULE
## "The Counselor's Role in Career Education"

1. Values-Attitude
   Simon, et al. Values Clarification
   Occupational View Deck - Chronical Guidance Publication, Moravia, New York
   Occupational Outlook Handbook
   Dictionary of Occupational Titles
   Guidance Associate film strip

2. Self-Awareness
   Richard Ruckart Self Awareness Through Group Dynamics
   Various Inventories, i.e., Kuder Preference, Strong Ohio Vocational Interest Survey, Holland's Self-Directed Search.

3. Decision-Making
   Career Decision Kit, J. C. Penney Company - Search for Values
   College Board - Deciding

4. Worker Alienation
   Terkle, Studs Working
   Herzberg, Fredrich Work and the Nature of Man
   Various articles, in Time, Newsweek

5. Race and Sex
   Members of the Appalachian Center for Educational Equity at the University of Tennessee
   Film strip: Olympus - Career Education for Minority and Low Income Persons

6. Resources
   Dictionary of Occupational Titles
   Occupational Outlook Handbook
   Chronical Guidance Services
   Largo Guidance Service
   Science Research Associates Guidance Service
   U.S.O.E. Department of Labor publications
   Local Newspapers, Magazines
   State Employment Security

7. Infusion
   Career Programs from:
   Andrews, Texas; Knox County Programs, Knoxville, Tennessee, Indiana State Department of Education; New Hampshire State Department Program.

8. In-Service
   Film strips -
   Olympus - Career Education and the Counselor
   Olympus - Challenges for Counselors

9. Liaison:
Film strips - Career Education and the
Olympus - Labor-Industry-Community
Mr. John Schacter - Rotary, Oak Ridge
Various school programs in career education, i.e., Andrews, Texas; Knox County, Knoxville, Tennessee; Indiana State Department of Education.

10. Evaluation
Various Evaluation models used by career education programs in Andrews, Texas; Knox County, Knoxville, Tennessee; Memphis, Tennessee. Articles in current journals from the American Personnel and Guidance Association

# LEARNER OUTCOME OBJECTIVES FOR THE MODULE
# "THE ADMINISTRATOR'S ROLE IN CAREER EDUCATION"
## (For Principals)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| Following completion of the administrator module of the Career Education Workshop school administrators should be able to complete the following tasks: | |
| 1. Determine school district and building level goals reflecting an understanding of a definition and goals of career education and needs of local community. | 1. Instructors will involve participants in the discussion of the three major goals of career education*:<br>a. Learning to live.<br>b. Learning to learn.<br>c. Learning to make a living. |
| 2. Formulate and administer policy regarding career education reflecting understanding of program efficiency. | 2. The instructor will lead participants' discussion of issues regarding administrators' formulation and carrying out of policy in order to keep the program operating efficiently and preventing the problems of**:<br>a. Input overload.<br>b. Unrealistic goal setting.<br>c. Lack of process skills.<br>d. Alienation.<br>e. Linkage failure. |
| 3. Develop a plan for the evaluation of career education program developed at the local level. | 3. Instructors will lead student participant discussion concerning the evaluation of the school district's Career Education Program through the***:<br>a. Needs of the students.<br>b. Curriculum development and/or revision.<br>c. New program offerings.<br>d. Needs of the community. |
| 4. Develop guidelines for staff development, selection, and recruitment of personnel most competent to implement the career education program. | 4. The instructors will acquaint participants with Davis'***guidelines for recruiting career educational personnel that have potential for leadership. |

*Use Smith, George N. Career Education: Local Administration of Programs. The Ohio State University - Center for Vocational and Technical Education (1973).

**Use Miles, M.B. The Affective Domain, Washington, D.C.: Communications Service Corp. (1970)

***Use Davis, Keith. Human Behavior. New York: McGraw-Hill, Inc. (1972).

## LEARNER OUTCOME OBJECTIVES FOR THE MODULE
## "COMMUNITY RESOURCES IN CAREER EDUCATION"
### (For All Workshop Participants)

| OBJECTIVES | INSTRUCTIONAL STRATEGIES |
|---|---|
| Following completion of the "Community Resources" module, participants should be able to complete the following tasks: | |
| 1. Organize a community/citizens advisory group to aid the educational staff in planning for, identifying, and using local community resources, and opportunities in business, industry and labor. | 1. There will be a panel presentation comprised of Chamber of Commerce spokesperson, industrial representative, labor leader, professional person, civic leader and instructor (group leader) discussing methods of organizing and probable cooperation that can be anticipated at the local community level. |
| 2. Plan and host a conference of community and education leaders of the school district to design plans for community involvement in career education. | 2. The instructor will lead discussion on merits of gaining community support prior to asking for direct community help.<br>Reference for learners: 2 |
| 3. Identify appropriate community resource personnel for student career education learning experiences. | 3. The instructor will utilize consultant to lead discussion on breadth of community personnel needed to represent as many occupational groups as deemed representative of community work figures. |
| 4. Identify employment opportunities for a selected occupation by using the *Occupations Outlook Handbook*, the State employment agency, and/or local employers. | 4. The instructor will introduce participants to the *Dictionary of Occupational Titles*, the *Occupations Outlook Handbook*, and reprints available from the second reference mentioned.<br>Reference for learners: 5, 6. |
| 5. Develop a plan cooperatively with a community organization, local business, or professional group for students to interact, observe, and/or participate with personnel employed in the world of work. | 5. The instructor will utilize an industry or business representative experienced in a situation where students are placed in work roles for observation or participation (during the regular school day or in after school or summer work) who will discuss the school/business or industry relationship and its strengths and weaknesses. |

The primary reference for this section is McKinney, L.A., *et al*. *Career Education Personnel Development - Ideas for University Planning*. Columbus: The Center for Vocational Education, the Ohio State University, 1975.

## References for the Module

Community Resources in Career Education

1. Burt, Samuel M. Career Education: Involving the Community and Its Resources. Columbus: Ohio State University, Center for Vocational and Technical Education, 1973. ED 985 564.

2. Career Education: What It Is and Why We Need It. Washington, D.C.: Chamber of Commerce of the United States, 1975.

3. Prince George's County Board of Education. Community Resources: A Community Approach in the Prince George's County Public School. Upper Marlboro, MD, 1973. ED 117 328.

4. Prince George's County Board of Education. Community Resources: A Partnership in Career Education. Upper Marlboro, MD, 1975. ED 118 913.

5. U.S. Department of Labor. Dictionary of Occupational Titles. Washington: GPO, 1976.

6. U.S. Department of Labor. Occupations Outlook Handbook. Washington: GPO, 1976.

7. Wirtz, W.W. Boundless Resource. Washington: The New Republic Book Co., 1975.

# APPENDIX B

## PLAN FOR LOCAL IMPLEMENTATION OF CAREER EDUCATION

Plan for Career Education (An Outline)

Criteria for Instructor Evaluation of Plan

Role of the Principal in Implementing Career Education--A Sample Plan

Counselor's Role in Career Education--A Sample Plan

Career Education Congruent with Mathematics--A Sample Teacher-Developed Plan

## PLAN FOR CAREER EDUCATION

Learner Objective 9: Develop a plan, acceptable to Workshop instructors, for initiating a career education program in the school utilizing the teacher-counselor-principal team trained in the Workshop.

Each Workshop participant will develop a personal set of plans, which will be evaluated by the instructors prior to the end of the Workshop, for implementing career education in his/her position (i.e., as teacher, counselor, or principal) within the school.

Each personal set of plans should be coordinated with the plans prepared by other team members from the same school. Plans should be written using the following outline:

1. Setting in which plans will be implemented
    - Location, size, grade levels, type of organization for instruction, etc., of school
    - Support for career education which might be expected from principal, system, school board, parents, business-industry-government
2. Rationale for career education in this setting--Use references to your outside reading
    - Define career education (use your own definition or one you have read)
    - Why should it be used in your setting?
    - Plans for, or results of, needs assessments (students, faculty, parents, the public)
3. How will career education be used in your setting during the coming months?
    - Objectives should be based on needs established in rationale (learner outcomes for teachers' plans, procedural objectives for administrators)
    - Methods/Procedures for accomplishing objectives
    - Materials/Resources to be utilized--should be based on a realistic estimate of what school or system can afford.
    - Plan for community involvement
4. Evaluation--How will you determine whether or not your objectives were accomplished?

## Criteria for Instructor Evaluation of Plan

1. Setting clearly described

2. Convincing rationale

   Clear, specific definition
   Incorporates appropriate references
   Plan for needs assessment will result in clear substantiation of needs

3. Plan for utilization

   Objectives flow directly from substantiated needs
   Objectives are specific and measurable
   Objectives can be achieved in the time span indicated
   Methods/procedures for accomplishing objectives are clearly described
   Materials/resources are adequately identified
   Materials/resources are appropriate for grade level(s) specified, and are obtainable in the setting (i.e., materials can be obtained with the financial resources likely to be available)
   A high level of interaction with the community is evidenced

4. Evaluation procedures for each objective are provided

Name of Student or Team ____________________

## CRITERIA FOR INSTRUCTOR EVALUATION OF PLAN

| | | |
|---|---|---|
| 1. Setting clearly described | 5 | |
| | | 5 |
| 2. Convincing rationale | | |
| Clear, specific definition | 10 | |
| Incorporates appropriate references | 10 | |
| Plan for needs assessment will result in clear substantiation of needs | 5 | |
| | | 25 |
| 3. Plan for utilization | | |
| Objectives flow directly from substantiated needs | 5 | |
| Objectives are specific and measurable | 10 | |
| Objectives can be achieved in the time span indicated | 5 | |
| Methods/procedures for accomplishing objectives are clearly described | 15 | |
| Materials/resources are adequately identified, are appropriate for grade level(s) specified, and are obtainable in the setting (i.e., materials can be obtained with the financial resources likely to be available) | 15 | |
| A high level of interaction with the community is evidenced | 10 | |
| | | 60 |
| 4. Evaluation procedures for each objective are provided | 10 | |
| | | 10 |
| | | 100 |

Madisonville Junior High School
Madisonville, TN

# ROLE OF THE PRINCIPAL IN IMPLEMENTING CAREER EDUCATION AT MADISONVILLE JR. HIGH SCHOOL

The role of the principal is that of leadership. The principal must emphasize career education as a priority goal for the school. S/he must involve the community, provide time, materials, and finances, and must initiate curriculum revision to allow infusion of career education.

Following is a breakdown of a principal's role and the methods to be used to accomplish each step.

I. Determine local interest in career education
    A. Initiate a student needs assessment
    B. Initiate a faculty needs assessment
    C. Initiate a parent needs assessment
    D. Initiate a school board opinion survey
    E. Collect and combine data from above assessments

II. Establish overall goals and objectives for career education.
    A. Develop an advisory committee for career education composed of two teachers, two parents, two business leaders and two students.
    B. Provide advisory committee with available data concerning career education.
        a. Provide the Tennessee State Plan and requirements
        b. Provide the Monroe County position and requirements
        c. Provide data formulated from needs assessment
    C. Provide leadership to advisory committee in the formulation of school goals in career education.

III. Provide best staff possible to infuse career education into present curriculum.
    A. Attempt to employ a career education co-ordinator
    B. Provide career education background to faculty
        a. Review general career education concepts
        b. Create an awareness of the need for career education

        - c. Familiarize staff with goals and objectives of school's career education program
        - d. Stress importance of teacher involvement
    - C. Identify and describe plan for implementation of career education into present curriculum.
    - D. Provide inservice time for all teachers to develop one career lesson plan for immediate use.
- IV. Identify sources of local support of career education.
    - A. Initiate a community occupation survey through PTA
    - B. Develop a list of available services identified by occupational survey
    - C. Provide a list of state and federal services available
    - D. Schedule time for "Career Education Days"
    - E. Initiate the development of a screening committee composed of two PTA members and two teachers to select career day speakers.
    - F. Provide opportunity for field trips
- V. Provide career education materials
    - A. Obtain and catalogue any materials which would aid teachers in the infusion of career education
    - B. Provide list of available resource materials available from Federal Government
    - C. Provide Tennessee Resource Directory for Career Education
- VI. Obtain funds to allow infusion process to occur
    - A. Allocate instructional funds for purchase of career education material
    - B. Apply for additional funds from local board to initiate career education
- VII. Initiate development of evaluation process
    - A. Provide models of evaluation of career education
    - B. Provide method for feedback from students, teachers and parents
    - C. Provide evaluation plan set up by the advisory committee

Nell Whitaker
Athens Junior High
Athens, TN

## Counselor's Role in Career Education

1. The counselor will prepare and maintain a file listing field trip possibilities. The file will be kept in the counselor's office. Each time a field trip is taken a notation will be made on a 5 in. by 8 in. index card with the date and class that participated. ( see attached sheet). There will be a place on the card for comments. The list will be compiled from the community survey sheet completed by the Chamber of Commerce members. ( see attached form)

2. The counselor will prepare and maintain a file of people in the community who would be willing to serve as resource persons in the classroom. This list will be compiled and kept in the same fashion as listed above. Parent surveys will be undertaken in an effort to identify parents who can and are willing to serve as resource speakers. ( see survey sheet ) This group feels that this will prove to be a good public relations project in addition to career education.

3. The counselor will supervise the testing program. The results will be utilized as one instrument that the students can use in career education decision making. The Stanford Achievement Test is presently administered to the school population in the spring of the year. All ninth graders are now given the Differential Aptitude Test in October. Hopefully, the Kuder Interest Inventory can be purchased to be used with seventh and eighth graders as an instrument to help the students identify their interests.

4. The counselor will assist teachers with field trips related to occupational units. This assistance will consist of making arrangements and accompanying the group, if requested by the classroom teacher.

5. The counselor will assist in the development of an overall career education infusing plan for the school. ( Example-this plan )

6. The counselor and media specialist will be responsible for the purchase and dissimination of career information. Presently, there is a career corner in the library. ( A list of all career information materials is listed in this paper.)

7. The counselor will assist the students in developing an understanding of values, choices, and personal goals in relationship to decision making. ( individual and group counseling )

8. The counselor will coordinate orientation to career preparation programs at the senior high. In the spring of each year, the counselor begins to work in large and small groups with individual counseling to help each ninth grade student prepare a program of study for the senior high years. The principal of the high school vocational division of McMinn County High School visits with the ninth graders explaining programs available. The same procedure is followed for the academic portion of the high school. A field trip is arranged to each school.

Through individual and small group counseling, a program is planned utilizing different instrument such as aptitude and achievement test results, expressed interest, et cetera.

9. The counselor will compile information concerning part-time and summer jobs. (also forms on which to apply for a social security number)

10. The counselor will assist students in filling our applications properly. ( Example: Each spring the Department of Employment Security works through the school in obtaining applicant for jobs in the CETA program.)

11. The counselor will be available, on the request of the classroom teacher, to work with groups as career education is being infused into the curriculum. ( see individual plans )

12. The counselor will keep on file clippings, articles, forms, et cetera that might be helpful to teachers. ( Example: student worksheet-see copy)

13. The counselor will counsel with potential drop-outs who have been identified mainly through poor grades and chronic absenteeism. Hopefully, the students will become aware of the limited number of job opportunities available to drop-outs. This will be accomplished through small group sessions utilizing various counseling technique.

14. The counselor will work with the handicapped students in helping them realize their potential.

15. The counselor will prepare bulletin boards pertaining to leisure time . ( see attached sheet)

Hopefully during the year all of the goals will be accomplished,

# Career Education Congruent With Mathematics

Colleen R. Gurley

Hixson High School

March 31, 1979

## Description

Hixson High School, now the largest high school in the Chattanooga Public School system, is located on a thirty-five acre tract twelve miles north of downtown Chattanooga. The present enrollment is 1280 students in grades 10 - 12.

Over the past three decades the school and community have changed from rural, to agricultural, and then to suburban. Today the community is a fast-growing suburb which has been annexed into the city of Chattanooga.

The former farm land is now residential areas, shopping centers, schools, recreational facilities and businesses. The Northgate Shopping Center which employs 1,100 persons was completed in 1972. Many other businesses have located in the area, including fast food services, department stores, and furniture retailers, all of which increase earning potential. A major TVA energy project, Sequoyah Nuclear Plant, is under construction to the north, and this has contributed to the population and economic growth. The 24,000 inhabitants of Hixson are primarily middle class, although the entire social spectrum is represented. Native Tennesseans out-number immigrants from other states.

Hixson, being a suburb of Chattanooga, provides a varied array of occupational opportunities. The over 600 manufacturers in the Hixson-Chattanooga area provide an attractive job market. Transportation industries created by the network of interstate highways, water transportation, as well as air and rail provide occupational opportunities.

Other opportunities include recreation, retail and wholesale trade, tourism, and communications. The professional occupational range includes architects, attorneys, accountants, educators, clergymen, and dentists.

The ethnic composition of Hixson High School is 99% caucasian and 1% minority races.

Hixson High students score slightly above average on all standardized tests using national norms. Forty-six percent of the graduates enroll in 4-year colleges, 16 percent enroll in junior colleges, and 38 percent enter the world of work. A very small percentage of students terminate their education before graduation.

## RATIONALE

"In a nation which has the highest youth unemployment rate in the world"[1] career education is of vital importance. Although virtually all students in advanced mathematics classes have the ability and the motivation to pursue post-secondary education, many seek advice about college and career choices. These students will not, in all probability, end up on welfare rolls. Their need is great, however, for guidance in choosing a life's work. Many are indecisive, lacking in self-understanding, and are not equipped with accurate and current occupational information.

The results of a student survey conducted during the past month indicate that more attention should be given at Hixson High to developing student self-awareness, career choices and alternatives, efficient work habits, and ways to use leisure time.

Other areas of weakness brought to light from the student survey were educational preparation for certain careers, the know-how of filling out forms used for jobs, money usage, and how to work in harmony with others.

In 1973 the Gallup Poll specifically asked about career education and "...90 percent (of those polled) agreed that the schools should give more emphasis to study of trades, professions and businesses to help students decide on their careers."[2]

The visiting committee of the Southern Association of Schools and Colleges made the following recommendations for Hixson High School.

> "that a survey of occupational opportunities for high school graduates be made in the community. An advisory committee should be formed to help with this survey. Laymen experienced in various crafts and representatives of local business and industry should be on this committee."

Sidney P. Marland Jr. has stated that "the primary responsibility for orchestrating what Hoyt calls 'the totality of experience' resides in the formal education structure."[3] The principals, counselors and many of the teachers of Hixson High indicate a willingness to infuse career education into the curriculum. It is possible that an inservice project dealing with the mechanics of infusion of career education will be planned for the near future.

The Chattanooga School Board is also supportive of the career education concept. At Hixson we have just had a computer terminal installed and plans for obtaining two more are in the making. Funding within reason would be forthcoming for materials needed for infusing career education.

Businesses and industries in the Hixson-Chattanooga area are supportive of school efforts. Persons from various companies are available for interviews, lectures, and class presentations. Our students are placed in part-time and summer positions. Field trips to many occupational sites are encouraged.

## DEFINITION

"Career education may be thought of as that aspect of the formal education process through which a person develops insights helpful in career selection, and is further provided with the abilities, attitudes, and understandings that will permit him to pursue his chosen career. Its role is to relate the student's total educational experience, at least in part, to the 'real' world with emphasis on his future need to support himself in a manner which will meet all his needs."[4] Ressler's definition of career education serves my philosophy and situation at Hixson High School.

## Footnotes

[1] Ressler, Ralph . Career Education: The New Frontier, Ohio: Charles A. Jones Publishing, 1973, p.2 (Taken from Special Report 24 Vocational Education: 'Innovations Revolutionize Career Training' Washington D. C. : National School Relations Association, 1972, p.17).

[2] Marland, Sidney P., and Hodgson, Barbara , ''Special Feature on Career Education,'' in Today's Education,Walter A. Graves,ed. (April-May 1978, Volume 67, Number 2) p.60.

[3] Marland,Sidney, '' Special Feature on Career Education'', P. 57.

4 Ressler, Ralph. Career Education: The New Frontier, Ohio: Charles A. Jones Publishing, 1973, p.1.

## Overall Goals For Career Education At Hixson High School

| | |
|---|---|
| Goal I. | Understanding of Self. |
| Goal II. | The Acquisition of a Sufficient Amount of Career Information With Which to Make Occupational Decisions. |
| Goal III. | An Appreciation of Work as Desirable and Necessary. |
| Goal IV. | The Relationship Between Aptitudes and Interests and One's Occupation . |
| Goal V. | Knowledge, Abilities, and Skills For Entry Into The World of Work Upon Completion of Chosen Levels of Education. |
| Goal VI. | Knowledge of Where and How to Seek Information and Guidance. |
| Goal VII. | Understanding the Relationship Between Personal Income and Expenditures. The Application of Economic Principles in the Purchase and Use of Goods and Services. |
| Goal VIII. | Understanding Personal, Work, Societal Responsibilities and Human Relationships. |

These goals are taken from the Tennessee State Plan for Career Education with the addition of Goal I. We felt not enough emphasis was placed on self-awareness in the Tennessee Plan.

## Objectives For Mathematics Courses Relating to Career Education

It is planned that the student be able to:

1. Define personal goals and relate them to career choice.
2. Identify advantages and disadvantages of certain careers.
3. Learn to detect and appreciate quality work.
4. Recognize personal limitations and how self-concept influences job success.
5. To relate specific training to specific career goals.
6. Relate general learning experiences to career opportunities.
7. Explore occupational supply and demand.
8. Become familiar with career clusters.
9. Locate career and occupational information.
10. Understand the process in choosing career alternatives.
11. Identify the ways technology can affect work and/or life style.
12. Understand economic factors relating to careers.
13. Accept individual differences.
14. Identify and recognize need for and benefits of good interpersonal relationships.
15. Identify responsibilities toward co-workers (in the classroom as well as in the world of work)
16. Understand the relationships between levels of education and employment opportunities.

These objectives were chosen from the Tennessee Plan for Career Education and are the ones that I feel can be realistically achieved in a mathematics course without any loss in content coverage.

## Class: Calculus

**Topic:** Maxima and Minima

**Aims:** Long Range: The student will gain more insight into the relationship between the academic and the world of work so that he might make more intelligent career selection decisions.

Immediate Objectives:

1. The student will find maximum and minimum function values using first and second derivative tests.
2. The student will focus on the relationship of maxima and minima problems to the uses in vocations and occupations.

**Approach:**

1. Review first and second derivative tests.
2. Ask students to consider:

The Brock Candy Company located in Chattanooga estimates that its profit p from the production of x thousands of bags of candy Easter eggs is given by the equation $p(x) = 1000(-x^2/4 + 8x - 60)$, where p is in dollars and $15 \leq x \leq 18$. How many bags of candy should the company produce in order to maximize its profit? What is maximum profit?

Discuss results found by students. Lead into discussion by asking students to answer the following questions:

What is profit?
Why are companies concerned with profits?
Is it possible to reach an upper limit where production beyond this limit is not profitable?
Who figured out this equation?
Would cost accounting require special abilities?
Is team effort important in deriving this type information? (the equation)

3. Divide into groups. Assign the attached model problems and have students find solutions.

Have each group prepare a list of vocations, professions or business and industrial concerns which might make use of the maxima or minima concept.

**Materials:** Overhead Transparency with the problem.
Copies of the model problems.

**Evaluation:** The student will be able to solve 3 of 4 maxima or minima problems, and to demonstrate in writing his understanding of where this concept is applied.

## Calculus: Maxima or Minima

1. A dairy farmer has 400 feet of fencing with which to construct a rectangular pasture adjacent to an existing fence. Find the dimensions of the pasture that will yield the maximum grazing area.

2. Easy Racer, Inc. of Hixson finds that the monthly cost C ( is thousands of dollars ) to produce x units per month of its best 10 speed bike is given by $C(x) = x^2/1000 - 2x + 1050$ for $800 \leq x \leq 1400$. Find the number of bikes the company should produce per month to minimize monthly production costs.

3. The Capital Container Company has a contract to manufacture 10,000 cardboard boxes with tops that are to have a square base and contain 8 cubic feet. Find the dimensions of the boxes that will minimize the material used in their manufacture.

4. A poster is to contain 50 $in^2$ of printed matter with margins of 4 in. each at top and bottom and 2 in. at each side. Find the over-all dimensions if the total area of the poster is a minimum.

5. A length of wire (length L) is cut into two pieces, one being bent to form a square and the other to form an equilateral triangle. How should the wire be cut (a) if the sum of the two areas is a minimum, (b) if the sum of the areas is a maximum?

6. Right circular cylindrical tin cans are to be manufactured to contain a given volume. There is no waste involved in cutting the tin that goes into the vertical sides of the can, but each end piece is to be cut from a square and the corners of the square wasted. Find the ratio of height to diameter for the most economical cans.

Class: Mathematics

Topic: A two day seminar on Career Education

Day I. Objectives: To become aware of some of the more interesting, more challenging occupations open to students with mathematical ability.

To become aware that mathematical techniques and concepts are being used as tools at an increasingly rapid pace in economics, psychology, sociology, political science, scientific research and business as well as in engineering, computer science and statistics.

To explore specific occupational areas and identify personal skill, values, and interests as they relate to these areas.

To become more aware that enjoyment of a job is of paramount importance.

Activities: Distribute descriptions of 40 careers (A few are attach

Students will make choices of the ones they have special interest in.

Divide into groups for discussion:

Groups will prepare a list of questions they will ask the visiting panel.

Each group will 'cluster' careers and add ones they know about and have interest in.

Groups will address the attached questions in discussion with leader preparing written answers.

Each student must choose a profession or vocation which is of interest to him and in which he feels adequately prepared for psychologically. He must then research his career choice, write a 2 or 3 page paper outlining job description, job requirements, out-look for employment in this position and why he feels he is suited for this particular Job. He must also include in this paper some career alternatives.

Each student will be required to give an oral report to the class. These reports will be interspersed throughout the quarter.

Materials: Copies of descriptions of careers.
Information on 'Clusters'
Copies (2) of the Dictionary of Occupational Titles
Lists of group discussion questions.

Evaluation: Students will be evaluated on the written paper describing career choice.

Students will be evaluated on the oral report to the class.

Group members will evaluate each other on contributions made in group discussion.

Informal teacher evaluation of group discussion.

Day 2:

Activity: Visiting Panel:
A Professional Engineer Ph.D.
Combustion Engineering
A Cost Accountant
Dupont
A Minister

Procedure: The panel will each address the following concepts: (6 - 8 minute time interval)

What attitudes, skills, interests, and educational requirements are necessary for success in my job?

What do I do?

What satisfactions do I receive from my job?

What headaches accompany my job?

Would I choose to do the same thing again?

After each panel member has completed his presentation the students will ask the questions prepared in the group meetings of the day befors.

Materials: Questions prepared by groups in advance.

Evaluation: Each student will be asked to write one member of the panel thanking him for making the presentation and explaining of what importance his comments were to the individual.

## Group Discussion

1. Comment on the statement made by Elliott Richardson to industrial leaders of our nation '' There is no satisfaction in life that equals that of work well done ... Work is a satisfaction that no one else can give you- and no one can take away''.
2. Comment on the statement ''All kinds of work are to be honored!
3. What kind of job or career am I interested in?
4. What requirements - educationally, emotionally, and physically - will this job have?
5. How many of these requirements can I meet now?
6. What advantages will this job have?
7. What disadvantages will this job have?
8. What is another job closely related to this one that I might choose?
9. What priorities will I set in choosing my life's work?
   Money? Enjoyment? A feeling of fulfillment?

After scanning the 4o - 50 job descriptions the student will choose one best suited for him. In the group discussions the students will individually address the above questions and the group leader will record answers. Additional comments from other group members will be recorded. Groups will number 4 members.

# APPENDIX C

## WORKSHOP FOLLOW-UP MATERIALS

Sample Newsletters--October and May Issues of Career Education Communiqué

First Follow-Up Questionnaire

Progress Report From UTK Workshop Participants (Summer 1978)

Second Follow-Up Questionnaire--Teacher-Counselor Form

Second Follow-Up Questionnaire--Principal Form

Request for Career Materials

May Letter to Superintendents

Number of Requests for Career Education Lesson Plans by Subject and Grade Level

Letter to Principals Requesting Career Education Materials

Business Reply Form for Evaluating Materials Which Were Mailed

Trudy W. Banta
212 Claxton Education Bldg.
University of Tennessee
Knoxville, TN 37916
(615) 974-4165

Career Education Workshop
COMMUNIQUE

October 2, 1978

Your intrepid Project Director recently left the relative familiarity of the Health, Education, Welfare milieu and ventured into the Department of Labor realm and found there MONEY--many of the dollars that might have been spent to accomplish Career Education or Vocational Education objectives!

The setting was Lexington, Kentucky, on September 19-21, a Work-Education Consortium Conference sponsored by the National Manpower Institute of Washington, D.C. We discovered that funding for many of your career education plans for youth 14-21 can be obtained through a CETA grant.

The Comprehensive Employment and Training Amendments of 1978 (CETA) incorporate as Title IV the Youth Employment and Demonstration Projects Act of 1977 (YEDPA). A major goal of YEDPA is to improve the linkages among employment, training, and education services available to youth. At the national level, the Secretaries of Labor and HEW have pledged to coordinate their various efforts in connection with the education-work transition for youth.

At the local level three YEDPA programs require cooperation between LEA's and CETA's prime sponsors.

1. Youth Incentive Entitlement Pilot Project - Authorizes jobs for in- and out-of-school youth. LEA's must provide employment opportunities for youth enrolled in these programs, and consult with prime sponsors concerning the development and implementation of projects.

2. Youth Community Conservation and Improvement Projects - Training and work experience must be coordinated with school-related programs in regard to both content and scheduling of courses. Academic credit must be awarded for the work experience.

***** 3. Youth Employment and Training Program (YETP) - Authorizes comprehensive services for youth 14-21, both in-school and out-of-school. A minimum of 22% of the YETP allocation must be expended for programs for in-school youth operated by agreement between the CETA prime sponsor and an LEA.

Other sections of the CETA legislation (to be passed by early October) authorize funding for linkages between prime sponsors and educational agencies.

While we await funding for the Career Education Incentive Act, we thought you should be aware of the CETA funding route. We have provided you with a basic vocabulary, but very little about program specifics. If you have ideas that might fit within one of these programs, have someone in your administrative structure explore the possibility with your CETA prime sponsor.

In Knoxville our prime sponsor is the Community Action Committee. If no one at your school can identify the prime sponsor in your area, call your local government officials. They will know.

Following are some examples of use of CETA funds to further the accomplishment of career education objectives:

## Education-Work Resource Guide

**Augusta, Georgia**

The Business-Education-Liaison of the National Alliance of Business's Augusta Metro has compiled an education-work resource guide for area students. The guide contains information on over 175 programs offered by local business and industry including opportunities for site tours, job and work counseling, classroom presentations, and general work and career information.

## Building Linkages Between Sectors of Education and Work

**Livonia, Michigan**

The Work-Education Council of Southeastern Michigan has joined with the Livonia Public Schools to explore ways to develop more effective linkages between the world of education and the world of employment. The project starts from the assumption that neither educators nor youth have sufficient insight into various aspects of the world of work outside the school environment. It is the goal of Project CEBY (Collaborative Efforts to Benefit Youth) to introduce both educators and youth to working environments and career options.

Accomplishments of the project include updating of a Community Resources Guide, development of a Teachers' Community Resource Manual and a Student Record Manual, and conducting of workshops in career awareness with special emphasis on initiating contact (site visits, exchange programs, use of guest speakers from the community) between the education sector and the rest of the community.

**Gratiot County, Michigan**

An annual Job Information Day provides a half-day cluster tour for all county ninth graders during which students are taken to work sites for observation and discussion of careers in specified areas. Close to 900 students participated in the April 1977 event.

An In-School Industry Program brings volunteers from business and industry into the schools to discuss economic education and how business and industry function.

The Career Exchange Day Program is an annual event providing a one-on-one, half-day, shadow exploration experience for all county eleventh graders. County Rotary clubs provide financial and volunteer support for the program.

The Share-a-Workday Program enables teachers to gain one to three days of on-the-job work experience designed to increase their classroom effectiveness.

School/Business Dialogues are conducted annually for the county's eleventh and twelfth graders, teachers, and counselors to promote communication on the realities of the business/industrial worlds and how they relate to formal education.

## Development and Implementation of an Occupational Awareness Course for Educators

Wheeling, West Virginia

The Education-Work Council of the Upper Ohio Valley in conjunction with four area colleges, the local school district, and the West Virginia Department of Education has developed a course offering educators first-hand exposure to the business, industry, labor, government, service and economic leaders of the Wheeling area. The fifteen-week course includes ten in-plant or on-site field studies and five workshops held at Wheeling College and West Liberty State College. Participants are registered in the West Virginia University Graduate School for three hours of graduate credit taken on their own time. Teachers, counselors, and administrators from elementary, secondary, and postsecondary institutions are enrolled. The first group of 27 educators completed the fifteen-week course in April 1978 and a second group is scheduled to begin in August 1978. The course, which covers 10 of the 15 U.S. Office of Education Occupational Clusters, is now listed as a permanent offering in the West Virginia University Catalog and has been declared an exemplary program by university officials.

## Exposure of High School Students to the Workplace: "The Shadow Program"

Buffalo, New York

The Shadow Program was established by the Niagara Frontier Industry-Education Council Inc. (NFIEC) in response to a request from the Superintendent of the Bureau of Cooperative Educational Services (BOCES) for more active business participation in preparing high school students for the work world. The program provides an opportunity for vocationally trained high school students to participate in a one week on-site "shadowing" of the daily activities of a practitioner in a particular career. This experience aids students in developing an understanding of the world of work and offers them a chance to see how their vocational training relates to the actual working experience.

Students from vocational education programs of both the Erie County BOCES and the Buffalo Public Schools are selected to participate in the program. Program administration and support services are provided by the NFIEC. Students are not paid for their participation in the program since it is part of their academic curriculum. They are insured under the schools' liability insurance policies. Placement of 100 students through the Shadow Program is the goal for the coming school year.

Dr. Trudy W. Banta
Career Education Project Director
212 Claxton Education Building
University of Tennessee
Knoxville, TN 37916

# CAREER EDUCATION COMMUNIQUÉ

May, 1979

## PROJECT PROVIDES TRAINING FOR 300

When the UTK Career Education Team entered into a contract with the U.S. Office of Career Education in June 1978, the agreement was that the Team would provide training in career education for 108 teachers, counselors, and principals from throughout Tennessee. Due to the late date of the award notice, only 40 individuals took part in the first Knoxville Workshop July 24 - August 11, 1978. The grant had provided funds for housing 108 persons for three weeks, and when only 40 persons, many of whom lived in Knoxville, showed up for the workshop, the result was several thousand dollars of unspent money in the housing category! These dollars have been converted to funds for travel and tuition for additional individuals during the 1978-79 academic year. Consequently, the UTK Team has been able to provide three additional workshops for inservice professionals, one in Memphis in November, one in Cleveland in March, and a second workshop in Knoxville which just ended on May 7. As a result of this extra work, the Team has now provided career education training for some 300 individuals, with 200 receiving academic credit at UTK.

## PROJECT MATERIALS NOW BEING DISTRIBUTED

On May 1 school superintendents throughout Tennessee were sent a letter acquainting them with the UTK Career Education Training Project and asking them to send on to interested principals in their systems a Request Form which would allow the principal to order

1) an Annotated Bibliography of Commercial Career Education Materials,
2) a description of the school-based team approach to implementing career education in the public schools,
3) infused lesson plans for any subject at any grade level.

If any of those receiving this Communiqué would like to request any of these materials, you are certainly encouraged to do so. Some of the infused lesson plans will be taken from plans submitted by our students during the three credit workshops conducted in Knoxville and Cleveland. Some examples of these lesson plans are included in this issue of the Communiqué.

Many thanks to Colleen Gurley, Darlene Dougherty and the Farragut Primary team (Knox County) for permitting us to use their good plans as examples!

# LEA/CETA Collaboration for Career Education

The Office of Career Education is currently supporting a project that will provide information and technical assistance to those school districts interested in implementing career education projects under the Youth Employment and Training Programs (YETP) of the Comprehensive Employment and Training Act (CETA).

The project, entitled **LEA/CETA Collaboration for Career Education**, is being conducted by Kirschner Associates, Inc. of Washington, DC. According to Hazel Rockhold, project director, methods and strategies for developing successful interagency agreements are extremely limited at state and local levels. The project staff has been working with state career education coordinators, local career education coordinators and CETA staff to identify successful strategies and provide technical assistance materials to those school districts who are having difficulty with implementation.

### Workshops, Case Studies

Staff members for Kirschner Associates and the Department of Labor conducted a training workshop for state career education coordinators last fall, focusing on the relationship of career education to YETP and methods of improving agreements for career education. The YETP program includes a 22 percent setaside for in-school programs aimed at teaching students about career education while providing them with jobs.

Project staff also conducted a nationwide survey of successful LEA/YETP agreements which will be used to assist state education agencies in their career education planning. Staff members are still in the process of conducting mini-conferences throughout the country which bring together selected LEA career education coordinators and CETA prime sponsors to discuss collaboration problems and productive solutions.

In-depth case studies of nine exemplary YETP/career education programs are also currently being conducted. Kirschner staff members are reviewing program curricula in Boston; Wilmington, Delaware; Jackson, Mississippi; St. Paul; Albuquerque; Shawnee Mission, Kansas; Weber, Utah; Denver; and La Mesa, California.

### Mini-Conferences

Notes from the mini-conferences, program descriptions of successful YETP/LEA programs and case studies of the nine exemplary YETP sites will be presented to state and local career education coordinators at a series of regional conferences which will be held June 1 through August 5 this year. According to Hazel Rockhold, the conferences will bring together CETA and LEA staff and will provide them with information and suggestions on working with career education programs through YETP.

The Bureau of Occupational and Adult Education is also sponsoring a study of vocational education and Youth Employment and Demonstration Project Act collaboration which is being conducted in the same manner as the LEA/YETP

(Continued on p. 8)

### Regional Conferences on LEA/CETA Collaboration

**LEA/CETA...** (Continued from p. 3)

program. Regional conferences are also planned on LEA/YEDPA programs. For more information on the vocational education/YEDPA programs, contact: Dr. Donald Drewes, Project Director, Conserva, Inc., 401 Oberline Rd., Suite 112, Raleigh, NC 27605, 919-832-7717.

For more information on the regional LEA/YETP regional conferences contact the regional commissioner for education programs, whose numbers are provided in the chart. For information on the general study contact: Hazel Rockhold, Project Director, Kirschner Associates, Inc., 1100 17th St., NW, Washington, DC 20036, 202-862-9466. — *By Cynthia Carter*

from: Education Funding Research Council Newsletter

**Region IV — June 14, 15**
Contact: Dr. William L. Lewis
Peachtree Street Seventh Building
50 7th St., NE
Atlanta, GA 30323
404-242-2063

Reservations:
Peachtree Plaza
404-659-1400

**Region V — July 26, 27**
Contact: Dr. Juliette Noone Lester
300 South Wacker Dr.
Chicago, IL 60606
312-353-5215

Reservations:
Sheraton O'Hare
6810 N. Manheim Rd.
Rosemont, IL
312-391-4400

[illegible]
Contact: Dr. Caroline Gillen
Federal Office Building
50 United Nations Building
San Francisco, CA 94102
415-556-4920

Reservations:
Hilton Hotel International
415-589-0770

**Region X — July 19, 20**
Contact: Allen Apodaca
Arcade Building
1321 Second Ave.
Seattle, WA 98101
206-399-0460

Reservations:
Edgewater Inn
Pier 67
206-624-7000

by: Colleen R. Gurley
Hixson High
Chattanooga, TN

Class: Calculus

Topic: Maxima and Minima

Aims: Long Range: The student will gain more insight into the relationship between the academic and the world of work so that he might make more intelligent career selection decisions.

Immediate Objectives:

1. The student will find maximum and minimum function values using first and second derivative tests.
2. The student will focus on the relationship of maxima and minima problems to the uses in vocations and occupations.

Approach:

1. Review first and second derivative tests.
2. Ask students to consider:

   The Brock Candy Company located in Chattanooga estimates that its profit p from the production of x thousands of bags of candy easter eggs is given by the equation $p(x) = 1000(-x^2/4 + 8x - 60)$, where p is in dollars and $15 \le x \le 18$. How many bags of candy should the company produce in order to maximize its profit? What is maximum profit?

   Discuss results found by students. Lead into discussion by asking students to answer the following questions:

   What is profit?
   Why are companies concerned with profits?
   Is it possible to reach an upper limit where production beyond this limit is not profitable?
   Who figured out this equation?
   Would cost accounting require special abilities?
   Is team effort important in deriving this type information? (the equation)

3. Divide into groups. Assign the attached model problems and have students find solutions.

   Have each group prepare a list of vocations, professio or business and industrial concerns which might make use of the maxima or minima concept.

Materials: Overhead Transparency with the problem.
Copies of the model problems.

Evaluation: The student will be able to solve 3 of 4 maxima or minima problems, and to demonstrate in writing his understanding of where this concept is applied.

Sample activity: math, reading

Darlene Dougherty - 4th Grade
Midway Elementary School
Roane County, TN

## ENGINEERS

Description: Engineers use a great deal of science and math in designing machines or working with people who use the machinery. In a factory, some engineers figure that cost of making an item. Before the final price can be set, one must first know how much the materials cost plus how much money was paid to the workers who made the item. The cost of sending or delivering the item from factory to store must also be figured. The price of the finished product must be high enough to make a profit for the company, but low enough to make people want to buy it.

Directions: Figure the total cost of building a table using the information below.

| | Cost of Materials |
|---|---|
| wood | $25.75 |
| nails | 1.35 |
| glue | 2.13 |
| varnish | 2.95 |
| Total | $ |

Labor Cost: Amount paid to the workers who built the table.

$32.50

Delivery Cost: Cost of delivering table to store.

$ 7.50

*TOTAL COST of the table $ ____________

The finished table will be sold for a greater amount of money than it took to build and deliver it. This is called profit. If the table sells for $119.95, how much profit will be made?

PROFIT $

FARRAGUT PRIMARY
(Knox County)

Level 2

CAREER THEME: Homemaking, fine arts, construction and transportation clusters.

SKILL: Word endings
Language Arts

BEHAVIORAL OBJECTIVE: Given no more than ten sentences, each of which contains a root word with the ending omitted, the child will copy the sentences completing the words.

CAREER OBJECTIVES: After participation in activities which provide information about occupations within consumer and homemaking, fine arts and humanities, construction, and transportation clusters, the student will be able to match the job titles with the duties performed and the tools used in each occupation when presented with a list of job titles.

FACILITATING ACTIVITIES

| Title | Procedure |
|---|---|
| Spelling | 1. The teacher will write the sentences on a chart or chalk board concerning occupations.<br>2. The students will write the sentences and complete the words. |

EXAMPLES:

1. The artist paint_ the picture yesterday.
2. The weaver use_ bright colored threads.
3. The play required several actor_.
4. The potter's wheel is turn__ fast.
5. The stagehand had to remove the dress__.

EVALUATION: The teacher will write a list of occupations that have been discussed and written about on the bulletin board. The students will draw a picture of a worker performing one of his duties. The student will place his/her picture beside the correct occupation.

CAREER THEME: Family and Neighborhood

SKILL: Explain position: before, between, after, top, bottom, left, and right.

Language Arts

BEHAVORIAL OBJECTIVE: After participating in activities that show relative position, the student will correctly point to or mark examples illustrating the concepts: before, between, after, top, bottom, left and right.

CAREER OBJECTIVE: After participation in activities which provide information about occupations in family and neighborhood, the student will be able to match the appropriate job title with the picture when presented with a sample of job pictures.

RESOURCES AND MATERIALS: Preparation needed for activity: Simulation of a street corner, using masking tape on the classroom floor.

FACILITATING ACTIVITIES:

Police Officer Directs Traffic

Procedure

Student will role play the police officer directing traffic. The teacher will orally tell the child in what direction to point.

Example:

1. left-The police officer directs traffic to go left.
2. right-the police officer directs a car to turn right.
3. before-The officer directs the traffic to stop before the line(crosswalk).
4. between-The officer directs the car to park between the lines.
5. after- The officer directs the traffic to stop until ~~the~~ after the child crosses the street.
6. top-The officer gives the driver directions by pointing to the top of the hill.

EVALUATION: The student will be able to show relative position by using a doll as teacher asks for him to illustrate directions.

DISCLAIMER

The material in this publication was prepared pursuant to a grant or contract from the Office of Education, U.S. Department of Health, Education, and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education. (Project No. 554AH80481, Grant #G007800035)

DISCRIMINATION PROHIBITED

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318, states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, career education projects supported under Sections 402 and 406 of the Education Amendments of 1974, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

The material in this publication was prepared pursuant to a grant or contract from the Office of Education, U.S. Dept. of Health, Education and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education.

# FIRST FOLLOW-UP QUESTIONNAIRE

ATTENTION:
WORKSHOP PARTICIPANTS

Please return this form immediately.

The terms of our grant from the U.S. Office of Education specify that we will contact each of you on a monthly basis to ascertain (1) the extent to which you are carrying out the career education plans you developed in August, and (2) any need you may have for assistance in implementing those plans.

Keep in mind that one or more of the career education team at UT could visit your school or system at any time this year to provide a brief workshop or individual assistance. Your principal and/or other teachers might want to become involved in such an in-service experience.

In case we need to contact you by phone, please send us your number.

Your Name ______________________________ Phone at School ______________________

Phone at Home ______________________

(After what time?) _____ p.m.

To what extent have you made use of the career education plan you developed in August? __________ Extensively used __________ Used with modifications __________ Not used at all. If not used at all, why not?

How may members of the UT faculty team assist you?

Return in enclosed reply envelope or mail to: Trudy W. Banta, 212 Claxton, College of Education, University of Tennessee, Knoxville, TN 37916.

Pages 117-119 have been deleted due to the fact that they contained confidential information.

**TEACHER-COUNSELOR**

## Second Follow-Up Questionnaire
## (for UTK Summer and Cleveland Workshop Participants)

Please assist in the final evaluation of the 1978-79 UTK Career Education Project by answering the following questions:

1. How extensively have you used the training you received during the Career Education Workshop which you attended?

   _____ Not at all     _____ Some     _____ Extensively

   Please describe.

2. Do you plan to make more use of your career education training next year (1979-80)?

   _____ Yes     _____ No

3. Did your principal attend the Workshop?

   _____ Yes     _____ No

4. Has your principal provided support for your efforts in career education?

   _____ Yes     _____ No     _____ I have not sought principal's support

   Please describe the support or lack of support.

5. In your opinion, how important is it to have your principal's support if you want to utilize career education in your work?

   _____ Not important     _____ Fairly important     _____ Very important

6. In your opinion, how much influence did attendance at the Career Education Workshop have on your principal's level of support for career education? (If your principal did not attend the Workshop, how much influence do you feel the Workshop would have had if she/he had attended?)

   _____ No influence     _____ Some influence     _____ Much influence

7. In your opinion, how important is it that a principal attend such a workshop if he/she is to provide the level of support needed for implementation of a school career education program?

   _____ Not important     _____ Somewhat important     _____ Very important

PRINCIPAL

## Second Follow-Up Questionnaire
## (for UTK Summer and Cleveland Workshop Participants)

Please assist in the final evaluation of the 1978-79 UTK Career Education Project by answering the following questions:

1. How extensively have you used the training you received during the Career Education Workshop which you attended?

_____ Not at all _____ Some _____ Extensively

Please describe.

2. Do you plan to make more use of your career education training next year (1979-80)?

_____ Yes _____ No

3. Have you provided support for your faculty in their career education efforts?

_____ Yes _____ No

Please describe the nature of that support.

Please indicate what problems you have faced.

4. In your opinion, how important is it that the faculty have the principal's support if they wish to use career education in their work?

_____ Not important _____ Fairly important _____ Very important

5. In your opinion, how much influence did attendance at the Career Education Workshop have on your level of support for career education?

_____ No influence _____ Some influence _____ Much influence

6. In your opinion, how important is it that a principal attend such a workshop if he/she is to provide the level of support needed for implementation of a school career education program?

_____ Not important _____ Somewhat important _____ Very important

## Request for Career Materials

NAME ____________________

Grade Level(s) ____________________

School Address ____________________

____________________

____________________

1. Subject(s) in which I would like to infuse career education include:

____________________

____________________

2. Specific unit(s), or area(s) of study, or learning center topic(s) for which I need career education materials include:

____________________

____________________

3. I would like to request the following kinds of materials to assist me in infusing career education into my teaching.

_____ Reproducable hand-out and work sheet materials for students

_____ Ideas for activities

_____ Full "how to do it" activity descriptions

_____ Ways of focusing, using current content, on career education

_____ Sets of career education goals and objectives

_____ Reading material (so that I may learn more about career education concepts.)

_____ Lists of books for students related to career education

Other (Please Specify) ____________________

____________________

____________________

____________________

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

BUREAU OF EDUCATIONAL RESEARCH AND SERVICE

May 1, 1979

Dear Superintendent:

IS CAREER EDUCATION AN INTEREST OF PRINCIPALS AND/OR TEACHERS (Grades K-12) IN YOUR SYSTEM?

During 1978-79 a grant from the U.S. Office of Career Education has enabled seven professors in the College of Education at the University of Tennessee, Knoxville (who have been developing career education curriculum since 1976) to offer four in-service workshops for principals, counselors, and teachers in Tennessee.

In the course of these workshops--two of which were held in Knoxville, one in Cleveland, and one in Memphis--teachers of all subjects at all grade levels were encouraged to develop lesson plans in which the teacher's own subject matter objectives could be taught by illustrating how that subject is used in one or more life roles--as family member, citizen, worker, or participant in leisure time activities.

Relating subject matter to the way it can be used in an occupation has been shown to increase student motivation to learn.

In each workshop principals and counselors have been encouraged to develop their own objectives and plans related to the support of teachers' career education plans. Counselors can help groups of students explore their own interests, values, strengths and limitations as these relate to various careers. Principals can develop linkages with parents and community which are essential to a successful career education effort. They can also assist teachers in acquiring a wide variety of information about careers. (Some of this is packaged by commerical publishers,) but much is available from business, industry and government at no cost.)

As a result of planning and conducting the in-service workshops the UTK Career Education Team has developed the following materials for distribution to schools throughout the State:

1) an annotated bibliography of commercial career education materials (based on personal review by the professors),

2) brief descriptions of the roles of teachers, counselors, principals as members of the school career education team, and

3) a series of sample lesson-plans that will assist teachers of any subject at any grade level to weave career education activities into the established curriculum.

(Career education is a set of strategies for teaching traditional subject matter; it is not an addition to existing curriculum.)

For your information, we are enclosing

- a brochure describing the UTK career education program, and
- a one-page description of the workshops conducted during 1978-79.

Finally, we are sending you a copy of a Request for Materials which you may wish to distribute to any of the principals in your system who are interested in career education. We will send up to six items free to any principal who requests them as long as our supplies last (or until June 30, when our grant period ends).

Most sincerely,

Trudy W. Banta

Trudy W. Banta
Associate Professor
Career Education Project Director

TWB/tkr

## REQUEST FOR CAREER EDUCATION MATERIALS

Yes, we are interested in obtaining the following career education materials for our school: (Please check no more than six (6) items.)

______ Annotated Bibliography of Commercially Prepared Career Education Materials

Sample Lesson Plans Illustrating the Infusion of Career Education into:

Specify Grade Level ______ Specify Subject Area (Examples: Grade 1, Language Arts or Grade 9, Science)

______

______

______

______

______

______

Send Materials to:

Your Name ______________________________

School ______________________ School System ______________________

Address ______________________________
Street

______________________________
City Zip Code

NOTE: Send request before June 15, 1979. Orders will be processed as received as long as supplies last. Order early to avoid disappointment. THERE IS NO CHARGE FOR THESE MATERIALS. (A federal grant makes possible the free distribution of these materials until June 30, 1979.)

Send Request to:

Dr. Trudy W. Banta
University of Tennessee
2046 Terrace Avenue
Knoxville, TN 37916
Telephone: (615) 974-4165

Number of Requests for Career Education Lesson Plans by Subject and Grade Level

| | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Language Arts | 5 | 20 | 15 | 20 | 10 | 5 | 15 | 10 | 10 | 15 | 10 | 10 | 5 |
| Math | 0 | 1 | 5 | 1 | 10 | 5 | 5 | 10 | 10 | 10 | 5 | 3 | 3 |
| Science | 0 | 2 | 5 | 5 | 0 | 5 | 5 | 5 | 5 | 10 | 5 | 1 | 1 |
| Social Studies | 0 | 0 | 1 | 1 | 5 | 10 | 10 | 10 | 10 | 5 | 10 | 5 | 3 |
| Art | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Music | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Economics | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 |
| Home Economics | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 1 | 1 | 0 |
| Industrial Arts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 0 | 0 |
| General Business | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Biology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Agriculture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Foreign Language | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Distributive Education | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Vocational Education | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 |

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

UREAU OF EDUCATIONAL RESEARCH AND SERVICE

May 1979

2046 Terrace Avenue
Knoxville, TN 37916

Dear Principal:

We are happy to send you the career education materials which you requested. As you know, a grant from the U.S. Office of Career Education has made it possible for us to distribute within the State of Tennessee materials related to the implementation of career education in grades K-12.

In addition to the bibliography and/or lesson planning ideas which you requested, you will find two other very important items in this package:

1. a Business Reply Card which we hope you will return immediately in order to help us evaluate our materials and their impact,
2. a document prepared by our Faculty Career Education Team which describes our "Team Approach to Career Education."

PLEASE ASK ANY POTENTIAL USER OF THESE CAREER EDUCATION MATERIALS TO READ THIS INTRODUCTION ENTITLED " A TEAM APPROACH TO CAREER EDUCATION" BEFORE USING THE MATERIALS! We feel it is essential that potential users understand what we mean by career education before they attempt to utilize our material!

If we may provide any further information about career education, please contact us.

Sincerely,

Trudy W. Banta

Trudy W. Banta
Associate Professor and Career Education
Project Director

Please help us evaluate our dissemination efforts. Respond to the following questions, then mail.

How would you rate the usefulness of these career education materials?

_____ More useful that I expected _____ Similar to what I expected

_____ Less useful than I had hoped*

Having reviewed these materials, do you plan to use them, or have you already used them?

_____ Have used _____ Plan to use _____ Not certain of plans _____ Have no plans to use

How have you used, or will you use, the materials?

_____ To obtain additional materials for students

_____ To obtain additional materials for school faculty

_____ As resources to encourage individual teachers to implement career education

_____ As resources to encourage individual counselors to implement career education

_____ As in-service training materials for groups of faculty members

_____ Other (please specify)

*If 'less useful', please explain why the materials did not meet your needs.

First Class
Permit No. 414
Knoxville, Tn.

**BUSINESS REPLY MAIL**

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

Bureau of Educational Research
and Service
212 Claxton Education Building
The University of Tennessee
Knoxville, Tennessee 37916

ATTN: Trudy W. Banta

# APPENDIX D

## ANNOTATED BIBLIOGRAPHY OF COMMERCIAL CAREER EDUCATION MATERIALS

Sample Announcement of Scheduled Visits by Publishers' Representatives

The Annotated Bibliography

## FACULTY & STUDENTS

interested in

## CAREER EDUCATION

are invited to join

The Faculty Career Education Team

in viewing

## COMMERCIAL CAREER EDUCATION MATERIALS

These representatives of publishing firms will be available on the date specified to display their company's career education materials and discuss them with interested faculty and students:

February 26 (Monday)--1:30 p.m.
Louise Bennett--Scholastic Book Services

February 28 (Wednesday)--10a.m.
Carl Calender--Science Research Associates

February 28 (Wednesday)--1:30 p.m.
Tony Hodge--McGraw Hill

March 2 (Friday)--10 a.m.
Larry Shoop--McKnight Introductory Career Series

All viewing of materials will be held in the Conference Room (CEB 306) unless otherwise noted.

# ANNOTATED BIBLIOGRAPHY
# OF
# COMMERCIAL
# CAREER EDUCATION MATERIALS

Prepared by
the
Career Education Team*
University of Tennessee, Knoxville
2046 Terrace
Knoxville, TN 37916

NOTE: The materials described in this Bibliography are of two types:

- career information (containing descriptive information about various careers) and
- career guidance (containing ideas for enhancing the student's self-awareness and knowledge of specific personal strengths, weaknesses, values, interests)

Representatives of publishing firms may attempt to sell these materials for a separate "career education course." To use the materials in this way would violate a basic principle: "career education is not an add-on, but is instead an instructional strategy that can be used to teach any subject at any grade level. It involves teaching subject matter objectives by showing students how the subject may be used in one's life roles as family member, citizen, worker, or participant in leisure pursuits."

The materials included in the Bibliography were examined by UTK Career Education Team members and evaluated using the 10-item scale which appears on the following page.

Highly recommended = average rating on the 10 items of 4+
Also recommended = average rating of 3.5-4

*
Trudy W. Banta and Sandra Lawson

Thomas N. Turner
George W. Harris, Jr.
Robert R. Hanson

Siegfried C. Dietz
Mark A. Hector
W. Jean Schindler

May 1979

## QUALITY

Please rate the quality of the material in each of the following areas, using the following 5-point system:

1 = Does a POOR job

2 = Does a FAIR job

3 = Does an ADEQUATE job

4 = Does an ABOVE AVERAGE job

5 = Does an OUTSTANDING job

| | (1) POOR | (2) FAIR | (3) ADEQUATE | (4) ABOVE AVERAGE | (5) OUT-STANDING | Not Applicable |
|---|---|---|---|---|---|---|
| 1. Provides ideas for infusing career education into the curriculum (as opposed to adding another "subject"). | | | | | | |
| 2. Provides ideas that are ready for classroom use. | | | | | | |
| 3. Interesting for the intended audience. | | | | | | |
| 4. Aimed at the appropriate audience (e.g., a story about work values would be appropriate career exploration material at middle school level; a training film inappropriate for elementary awareness). | | | | | | |
| 5. Contains significant content (important for students/teachers to learn). | | | | | | |
| 6. Provides aids for the instructor using the material. | | | | | | |
| 7. Free from sexual/ethnic stereotyping. | | | | | | |
| 8. Organization of the content seems logical--makes sense. | | | | | | |
| 9a. PRINT MATERIALS ONLY: Contains appropriate illustrations. | | | | | | |
| OR 9b. NON-PRINT MATERIALS ONLY: "Professional" presentation (content well selected and presented) | | | | | | |
| 10. Considering other similar materials I have seen, I would rate the overall quality of this material as ⟶ (1,2,3,4, or 5) | | | | | | |

COMMENTS:

### DISCLAIMER

The material in this publication was prepared pursuant to a grant or contract from the Office of Education, U.S. Department of Health, Education, and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education. (Project No. 554AH80481, Grant #G0078C0035)

### DISCRIMINATION PROHIBITED

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318, states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, career education projects supported under Sections 402 and 406 of the Education Amendments of 1974, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

The material in this publication was prepared pursuant to a grant or contract from the Office of Education, U.S. Dept. of Health, Education and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education.

## HIGHLY RECOMMENDED

### McKnight Publishing Company

M,S "The AEL (Appalachia Educational Lab) Career Decision-Making Program" utilizes sound filmstrips to counteract occupational stereotyping by showing individuals in nonstereotyped roles. There are 18 filmstrips/cassettes and they address such topics as: Career Goals, Self-Exploration: Who Will I Be?, Working Conditions and Physical Demands, Credentials and Competencies, and Social Influences.

Individual filmstrip/cassette sets may be ordered for $25 per set; the tape cassette cost is $10; the entire set costs $398.

M,S "Exploring Career Decision-Making" (ECDM) is a set of individualized materials which may be integrated into the existing guidance program or subject areas such as social studies and language arts. The 15 text units are self-contained and include a variety of experiences such as role playing and hands-on experiences. Emphasis is placed on basic concepts that each student can use to explore personal interests, abilities, and goals in relation to the world of work.

Student Text - $9.96
Teacher's Edition - $19.95
Activity Book - $8.97

M,S "The Career Information System" (CIS) consists of coordinated components which provide a comprehensive system for organizing, indexing, and filing career information resources for ready access by students, teachers, and counselors. This system helps provide the link between the individual's understanding of self and the world of work, and the body of occupational information needed for career exploration and preparation. Components in this system may be purchased separately:

1. CIS Professional Manual - $12.00
2. Individualized Activities for Career Exploration - $6.96
3. Dictionary of Occupational Titles (DOT) - $12.00
4. Occupational Outlook Handbook - $8
5. Worker Trait Group Keysort Deck - $49
6. Worker Trait Group Guide (adaptation of the DOT) - $11.95

### Science Research Associates (SRA)

E "Focus" Kit

Stage I called Awareness is designed for K-3 and covers such topics as self-concept development, responding to the environment, socialization, sharing, and problem solving. The complete Kit which includes five filmstrips, four records or cassettes, one easel, one pupil activity book, and 20 photoboards costs $167.75 with records, or $176.55 with cassettes. Components may be purchased separately.

Filmstrip - $14.50
Cassette - $13.90
Record - $9.75
Teacher's Guide - $7.60
Photoboards (20) - $38.80

E = Elementary (Grades 1-4) M = Middle (Grades 5-8)
S = Secondary (Grades 9-12)

E Stage II entitled Responding is designed for grades 2-4. The stories and activities encourage students to think and talk about their personal, social, emotional, and intellectual lives. The complete Kit costs $184.25.

M Stage III entitled Involvement is made for grades 4-6 and is designed to elicit students' ideas and feelings, to encourage them to think about their values and to act on them.

Complete Kit $184.25
Separate Components - same charge as indicated in Stage I

M,S "Widening Occupational Roles Kit"(WORK) was developed for grades 6-10. WORK Briefs provide an introduction to 340 assorted jobs in fictional narrative. Filmstrips and the WORKSCOPE scanner lead to appropriate groups of briefs for exploring related jobs. The Handbook of Job Facts capsulizes, in chart form, information about duties, education, training, special qualifications, advancement, earnings, and outlook for 300 key jobs.

WORK - $269.50
Separate components:
Student Record Books (25) - $17.50
2 Filmstrips/cassette - $43.90
Set of 340 WORK Briefs - $152.35
WORKSCOPE - $18.15
Teacher's Guide - $3.19
Specimen Set - $5.00

M,S "The Occupational Exploration Kit" is similar to the WORK but it is used for grades 9-adult. The Kit contains 400 illustrated four-page briefs which provide thorough, up-to-date descriptions of individual jobs, including qualifications and training, earnings and outlook, plus selected references. Twenty Job Family Booklets provide additional information relating jobs by interests and skills. Seven Guidance Series Booklets cover the world of work, personality and interests in relation to career choice, school subjects as related to careers, part-time jobs, and job hunting.

Kit - $195
Specimen Set - $4.55
Student Record Books (25) - $9.30
OccuScan Coding Device - $16.60
Set of 400 Occupational Briefs - $156.00

M,S "The Job Experience Kit" simulates work experiences in 20 representative occupations for students in grades 8-14. The Kit contains actual occupational tools and hands-on experiences; and, the Kit uses a realistic problem-solving approach to provide insight into a variety of occupational levels and fields. Task materials and a pad of 30 answer sheets help students experience such occupations as accountant, auto mechanic, librarian, motel manager, truck driver, lawyer, etc.

Kit - $199
Specimen Set - $5.20

Pathescope Educational Media, Inc.

E,M "People at Work" is a program designed for career awareness in grades 4-8. It is divided into 30 different units, each one dealing with a different field of work and covering the following aspects of that field: the human need it serves; dominant themes and traditions; specific occupations, work tasks, tools and equipment; some of the people who work in that field; the rewards received by the individual and society; and future changes and prospects. Each unit contains one filmstrip, one cassette, and ten spirit masters. The cost is $28 per unit or $765 for all 30 programs.

M,S "Careers" is a broad career exploration program designed for grades 7-12. From a bus driver in Louisiana and a school principal in Utah to a sales representative in New York or a farmer in North Dakota, "Careers" roams the nation watching and listening to real people talking about their jobs, how they got started, and what they like and do not like about them. In the two-part format, the first part focuses on the job characteristics and the second part focuses on the personal and academic or training qualifications.

Each program consists of 2 filmstrips, 2 cassettes and a teacher's manual - $50.

## Changing Times Education Service

E "Real People at Work" is a sequentially developed career awareness program. The program begins at the kindergarten level by relating the concept of work to simple tasks that children perform; for example, making the bed, washing hands, dusting, etc. At the first grade level, these task-performance habits are reinforced; also reinforced is the child-parent-teacher communication begun in kindergarten.

Multimedia Kit for each grade level contains 30 pads of activity sheets, 30 posters, records, 30 badges, bulletin board display project, spiritmasters and a guide to teaching.

Kindergarten - $245
First Grade - $295

## King Features

M,S Real World is a monthly career newspaper that is a reading program. Each issue features interviews with persons in different types of jobs; for example, jewelry-makers Tod and Susan Michel, cab-driver Judd Hirsch, rock-group The Rolling Stones, architect Patrick Sherwood. The newspaper also features articles such as "The Do's and Don'ts of Taking Tests," "What You Need to Know About Credit," "Should Girls Play on Boys' Teams?" and "Small Jobs Can Pay Big Money."

The teacher's 6-page instructional guide that comes with each edition of Real World, plus vocabulary and comprehension exercises combine to give each student a complete reading and career education program in one monthly package.

Full 9-month program (30 newspapers/mo) - $135
(15 newspapers/mo) - $67.50
Fall semester program (30) - $60
(15) - $30
Spring semester program (30) - $75
(15) -$37.50

## ALSO RECOMMENDED

### McKnight Publishing Company

E,M (For Special Needs Students--3rd grade reading level)

"Entering the World of Work" is a new program which is the outgrowth of a survey of special education teachers and supervisors. The program relates to the specific needs of educable mentally retarded, learning disabled, and other handicapped students in looking for jobs, adapting to the work environment, advancing on the job, and learning adult responsibilities.

Student Text - $9.48
Activity Book - $2.47
Activities Answer Key - N/C
Professional Set which includes each of the above - $10

### Science Research Associates (SRA)

M,S "KEYS"is a career exploration program for grades 6-adult. Ten filmstrips and cassettes, a teacher's guide, and a career guidance Manual help stimulate interest in occupations which are grouped into the same ten interest areas measured by the Kuder E interest inventory. The first filmstrip introduces ten job families; the other nine filmstrips show actual on-the-job interviews.

Kit - $176
Specimen Set -$22.55

### Changing Times Education Service

E "Real People at Work" for grades two through six stresses occupational awareness through 150 case studies of real people and their occupations. The case studies illustrate the value of team work, safety, and a balanced lifestyle based on home, work, and community.

Multimedia Kits - 2nd-4th grades $345
(includes textbooks) 5th-6th grades $225

S "Career Directions" is a decision-training program designed for Career Education in grades 9-12. There are six different multimedia kits and the titles are: Deciding on Your Career, Choosing the Kind of Job You Want, Entering the Job Market, Staying With It and Getting Ahead, Workers and Management, Unions and You. (Each kit includes 30 textbooks, 2 sound filmstrips, 2 spiritmasters, 2 transparencies, and a teacher's guide.)

Each individual kit - $89.50
All six Career Direction Kits - $480

S "Exploring Careers" is a comprehensive career exploration program based on a modified version of the 4-groups of clusters suggested by U.S.O.E. Each cluster is coordinated to a specific industry to assure a wide representation of careers. The four career clusters are: "Exploring Careers in Business," "Exploring Careers in Service," "Exploring Careers in Science," and "Exploring Careers in Communications and Transportation."

Each career cluster - $72

### McGraw Hill

M,S "Careers in Focus" is a flexible program for career exploration in grades 6-10. It is designed to meet the curriculum needs of every type of career education program: infusion into existing subject-matter courses; the career exploration curriculum; the career resource center. The program consists of 14 modules--one self-discovery module plus 13 career-related modules based on the U.S. Office of Education's career clusters such as construction, health, public social service occupations:

1 cluster set: student manual, worksheet booklet, teacher's manual and key, a sound filmstrip, and three interview cassettes - $110

S "Career Core Competencies" has been developed to use in grades 9-12. The program consists of seven self-contained text-workbooks with accompanying A-V materials (1 filmstrip and 2 cassettes) that relate to the following job-related topics: Schools and Careers, Knowing Yourself, Making Decisions Work, Communication at Work, Working at Human Relations, Getting the Job, Growing on the Job.

$150 per kit for 10 students with filmstrip and cassettes

### King Features

M The "Career Awareness Program" presents serious, factually detailed information about the fifteen U.S.O.E. career clusters and the training and requirements for each. Advantages and disadvantages are explained, and opportunities for advancement and fulfillment are illustrated. The program consists of 75 full-color, 32-page books cleverly disguised as Popeye comic books; two student involvement charts; a bingo career-awareness game; a teacher's guide; and a display rack.

Complete Career Awareness Program - $59.50
Career Books (5-25 copies) - .50 each
(26-99 copies) - .45 each
Career Awareness Bingo Game - $6.95
Set of two student involvement charts - $3.50
Teacher's Guide - $3.00
Display Rack - $9.95
25 How-to-Study Booklets - $3.95

Scholastic

E,M "Becoming Yourself" was developed principally for students in grades 4-6. The program encourages each student to explore him/herself (Unit I) and to express, to communicate, to listen, and to make decisions (Unit II). Unit III emphasizes the understanding of self and others.

The complete program contains all three units (12 sound filmstrips and 3 teaching guides). The cost is $179.50.

The individual units include 4 filmstrips and a teaching guide. The cost is $69.50 per unit.

E,M "Explore" is a three-unit program and is recommended for use in grades 4-8. In 44 real-life interviews conducted between students and workers across the country students are able to watch real people at work and to hear how they feel about their jobs. Students are also encouraged to think about their own personalities, skills, interests in relation to a career direction.

Complete program - $199.50
Individual Units - $ 79.50

M,S "Discovery" is especially useful in grades 7-10 to help students outline their abilities and interests, and explore job opportunities. Forty-nine people discuss a typical day's work, the job requirements and duties.

The unit contains 8 full-color 15 minute sound filmstrips with records or cassettes, 30 career logbooks, and a 144-page teaching guide. The cost is $169.50.

M,S "Opportunity" allows students to obtain actual practice in activities and procedures involved in obtaining employment by experiencing a person-to-person exchange with the interviewer on the filmstrip. The student may respond to such questions as, "Why do you want this job?", "What kind of experience/training do you have?", "Salary requirements?", "Job goals?", etc. Five filmstrips explore 15 careers.

The unit contains 8 sound filmstrips with records or cassettes, thirty logbooks, and a 96-page teaching guide. The cost is $169.50.

M,S The "Family Living" program is designed for grades 8-12 and is helpful to students in working through such problems as peer pressure, frustration, identity, family cooperation, etc. Values, personal worth and self-confidence are emphasized.

Each of the three units contains 3 sound filmstrips with records or cassettes, 9 student worksheets and a teacher's portfolio. The complete program costs $179.50. The individual units cost $69.50 each.

Harcourt Brace Jovanovich

E,M "Careers" is a career education and supplemental reading program for the intermediate and junior high grades, based on 128 career fields--either goods-producing or service-producing industries. Emphasis is placed both on the careers within these industries and on development of reading skills. Each kit contains two copies of 32 different story folders, two copies of 32 different activity cards to accompany each story folder, one sound filmstrip, one cassette, 30 student management folders, and a teacher's manual.

Level A (grade 4) - $96.00
Level B (grade 5) - $96.00
Level C (grade 6) - $96.00
Level D (Junior High) - $96.00

Houghton Mifflin

E,M "Career Insights and Self Awareness" games are designed for grades 4-8. The six games help build self- and career-understanding. They are entitled: Interests Continuum, Life Goals, Life Situations, How I See My Abilities, Data-People-Things-Puzzle, and Interests Triangle. These games were successfully field-tested for 2½ years. The complete six-game kit costs $60.00.

E,M "Bread and Butterflies" is a workbook for grades 4-6. This workbook is based on the highly successful, nationwide TV/film program created under the supervision of the agency for Instructional Television. "Bread and Butterflies" contains diversified thought-provoking activities--fill-in charts, games, open-ended stories, role-playing, etc.--which helps build positive self-understanding, strengthens planning, problem-solving, and decision-making skills.

Each student workbook costs - $2.25
Teachers handbook - $1.80

E,M "Job Lab I" is useful in grades 3-8. This resource kit is built around the 15 occupational clusters (250 jobs).

The kit for students consists of an overview and work activities description in a single booklet for each cluster, and a series of 6 X 9 job description and resource cards. The cost is $93.00. Demonstration Kit is $1.50.

Julian Messner & Company

M,S Work As You Like It (1979) by John Ott and Rosemary Stroer is a book which lets students take a look at unusual jobs. The book has 192 pages and is applicable for students aged 12 and up. The cost is $7.79.

M "Messner Career Books" are highly specialized trade books about highly specialized and unique careers. These books, which consist of 25 different career awareness areas, are good for students with unusual interests. The price ranges from $6.00 to $8.00 per book. Some of the titles and their corresponding prices are as follows:

Careers in Consumer Protection - $6.64
Careers in Elective Government - $7.79
Careers in Environmental Protection - $6.64
Careers in the Health Field - $7.29
Careers in Horticultural Services - $7.79
Nontraditional Careers for Women - $5.79
On-the-Job Training and Where to Get It - $7.29

Your Career: If You're Not Going
to College - $7.29
Your Career in Interior Design - $7.79
Your Career in Teaching - $5.79

Curriculum Innovations, Inc.

M Career World is a periodical which focuses on different careers and the corresponding work roles. This periodical is helpful in increasing career awareness. The cost is $3.50/student per school year (9 months).

S Current Life Studies is a periodical which deals with real-life problems. This periodical emphasizes family roles, responsibilities, values, and life skills. The price is $3.75 per student per school year.

American Learning Systems

E,M,S "Building Your Tomorrows" consists of 131 field-tested modules which are designed to infuse career education into the standard classroom curriculum. This program is divided into three curriculum strands: Learning about Self, Learning About the World of Work, and Goal Formulation and Personal Planning. Each curriculum strand includes modules which are applicable to grades K-12, and which include titles such as: My Likes, My Looks, My Feelings (K-1); Plans and Goals (K-1); Learning About Goods and Services (2-3); Your Values and Your Self-Concept (4-6); Relating School Experiences to Job Attitudes (7-9); Living on Your Own (10-12).

Each classroom set consists of one teacher's guide, 30 student activity materials, and 30 module tests; prices per set range from $8.28 to $28.25. Components may also be purchased separately:

Teachers guide - $3.95 to $4.95
Student activity
materials (pkg. of 10) - .55 to $8.80
Module tests (pkg. of 10) - $1.10 to $2.20

## APPENDIX E

## MATERIALS USED TO PUBLICIZE THE TRAINING PROJECT

Initial Workshop Brochure

UTK News Services Press Release

Sample Published Articles

Memorandum to Departments of Education in Selected Institutions

Summer Workshop Schedule

Memo to Principals of Public Schools in East Tennessee

Letter to Superintendents Advising of Availability of Materials From the UTK Career Education Team

Dean's Memorandum to Teacher Preparation Institutions Advising of Availability of Materials From the UTK Faculty Team

# CAREER EDUCATION WORKSHOP

July 24-August ~~18~~, 1978
11

Co-Sponsored by:
Division of Continuing Education
and
College of Education
The University of Tennessee, Knoxville

WORKSHOPS AND OFF CAMPUS PROGRAMS
1629 Melrose Ave.
The University of Tennessee
Knoxville, Tennessee
37916

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Workshops and Off Campus Programs
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1629 Melrose Avenue
The University of Tennessee
Knoxville, Tennessee 37916

## CAREER EDUCATION WORKSHOP

Seven UTK professors who contributed articles to the recent publication *Career Education A Framework for Teamwork* will offer a summer workshop designed for TEAMS of inservice professionals interested in implementing career education in their own schools. A grant from the U.S. Office of Career Education will cover the costs of **tuition** and **on-campus housing** for those teams selected to attend the workshop.

Emphasis will be given in the workshop to a team approach to career education in the school. Interested principals are encouraged, therefore, to form a team to attend the workshop. To be eligible for selection, the school-based team should include

- principal, counselor and two teachers, or
- principal, curriculum supervisor, and two teachers, or
- principal and three teachers (if school has no counselor)

Three such school-based teams will be selected from each of Tennessee's nine development districts. Applications received earliest will be given priority in the selection process. All **applications should be returned by ~~June 20~~, 1978.** July 5 Teams will be notified of their selection by ~~July 5~~, 1978. July 12

By the end of the workshop each school-based team will develop a plan for infusing career education into the existing curriculum of their school during 1978-79. Workshop staff will visit each development district during the school year to offer assistance and to ensure that career education plans are being carried out.

### WORKSHOP TOPICS

"Introduction to Career Education" — Trudy W. Banta Bureau of Educational Research and Service

"Mobilizing Community Resources for Career Education" Robert R. Hanson, Vocational-Technical Education (Will include field trips to local business and industrial sites)

Specialized modules for administrators, counselors and teachers include:

"The Administrator's Role in Career Education" — George W. Harris, Jr., Educational Administration & Supervision

"The Counselor's Role in Career Education" — Siegfried C. Dietz and Mark A. Hector, Educational Psychology and Guidance

"Infusing Career Education into the Curriculum" — Thomas N. Turner, Curriculum & Instruction

"Career Education for the Handicapped" — Lee Murphy, Special Education

FOR ADDITIONAL INFORMATION, CONTACT
Dr. Trudy W. Banta, Associate Professor
212 Claxton Education Building
The University of Tennessee
Knoxville, Tennessee 37916
(615) 974-4165

### THE INFORMATION

**Meeting Place:** Stokely Mgmt. Center, G2

**Dates:** July 24-August ~~18~~ 11, 1978

**Time:** 1:00 p.m.-~~3~~ 4:00 p.m. M-F

**Credit:** Workshop may be taken for graduate or undergraduate credit (4 credit hours) or as an audit. University admission policies will hold for all participants.

The Department of Workshops & Off-Campus Programs reserves the right to cancel, postpone, or combine classes when necessary.

**Course Number:** Participants may take this workshop either as Curriculum and Instruction 5790 or Educational Psychology 5790.

**Meals:** Meals are available at University dining facilities and nearby off-campus eating establishments at participants' expense.

**Recreation:** Use of University recreation facilities is permitted for a nominal fee.

EEO/TITLE IX/SECTION 504 STATEMENT

The University of Tennessee, Knoxville does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap or veteran status in provision of educational opportunities or employment opportunities and benefits.

UTK does not discriminate on the basis of sex or handicap in the education programs and activities which it operates, pursuant to the requirements of Title IX of the Education Amendments of 1972, Pub. L. 92-318 and Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112, respectively. This policy extends to both employment by and admission to the University.

Inquiries concerning Title IX and Section 504 should be directed to the Office of the Vice Chancellor for Planning and Administration, 525 Andy Holt Tower, 974-4391. Charges of violation of the above policy should also be directed to the Office of the Vice-Chancellor for Planning and Administration.

THE UNIVERSITY OF TENNESSEE
Dr. Edward J. Boling, *President*
Dr. Jack E. Reese, *Chancellor, UTK*
Dr. Walter R. Herndon, *Vice Chancellor of Academic Affairs*
Dr. William Coffield, *Dean, College of Education*
Dr. Joseph P. Goddard, *Dean of Continuing Education*
Dr. Charles M. Peccolo, *Director, Bureau of Educational Research and Service*

## REGISTRATION FORM

Yes, our school is interested in implementing career education in 1978-79. The team we propose to send to the Career Education Workshop at UTK July 24 - August ~~18~~ 11 1978 will include:

| NAME | POSITION | SUMMER ADDRESS |
|---|---|---|
| | | STREET CITY ZIP TEL |
| | | STREET CITY ZIP TEL |
| | | STREET CITY ZIP TEL |
| | | STREET CITY ZIP TEL |

Name of School ____________

School System ____________

Return By: ~~June 20, 1978~~

# UTK NEWS FROM UT KNOXVILLE

ISSUED BY: UTK NEWS SERVICES, THE UNIVERSITY OF TENNESSEE, KNOXVILLE (615) 974-2225

Education Workshop

June 29, 1978
FOR IMMEDIATE RELEASE

Principals, counselors and teachers from school systems throughout Tennessee may attend a tuition-free Career Education Workshop July 24 - Aug. 11 at the University of Tennessee, Knoxville.

A $90,000 grant from the U.S. Office of Education will provide tuition and campus housing costs for teams composed of the principal, a counselor and two teachers from each of 27 schools -- three in each of Tennessee's nine development districts. The workshop is co-sponsored by UTK's College of Education and the Division of Continuing Education.

Professors from five departments in the College of Education will assist the school-based teams with plans for implementing career education in their schools. School personnel from all grade levels will be involved.

Deans of colleges of education throughout the state may also send representatives to observe the workshop and learn more about career education training at the college level.

For information concerning team selection contact Dr. Trudy W. Banta, 212 Claxton Education Bldg., UT, Knoxville, 37916, or call 615-974-4165. Banta, associate professor in UTK's Bureau of Education Research and Service, is the conference director.

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## Sample Published Articles

Chatt. News-Free Press
June 30, 1978

# *Career Education Meet Set At UT July 24-Aug. 11*

**Principals, counselors and teachers from Tennessee school systems may attend a tuition-free Career Education Workshop July 24-August 11 at UT-Knoxville.**

**A $90,000 U.S. Office of Education grant will provide tuition and campus housing costs for teams composed of the principal, a counselor and two teachers from three schools in each of Tennessee's nine development districts.**

**Professors from five departments in the UT College of Education will assist the teams with plans for implementing career education in their schools. School personnel from all grade levels will be involved.**

**Deans of colleges of education throughout the state may also send representatives to observe the workshop and learn more about career education training at the college level.**

**Persons desiring further information on team selection should contact conference director Dr. Trudy W. Banta, 212 Claxton Education Bldg.; UT. Knoxville, 37916, or call 974-4165.**

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[illegible]
July 2 1978

# Workshop Planned For Principals

KNOXVILLE, Tenn. — Principals, counselors and teachers from school systems throughout Tennessee may attend a tuition-free career education workshop July 24 - Aug. 11, at the University of Tennessee.

A $90,000 grant from the U.S. Office of Education will provide tuition and campus housing costs for teams composed of the principal, a counselor and two teachers from each of 27 schools — three in each of Tennessee's nine development districts.

The workshop is co-sponsored by UTK's College of Education and the Division of Continuing Education.

Professors from five departments in the College of Education will assist the school-based teams with plans for implementing career education in their schools. School personnel from all grade levels will be involved.

Persons interested in information concerning team selection may contact Dr. Trudy W. Banta, 212 Claxton Education Bldg., UT, Knoxville, Tenn., 37819, or call 615-974-4165. Banta, associate professor in UTK's Bureau of Education Research and Service, is the conference director.

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Jackson Sun
July 5, 1978

# Career Education Seminar Set

KNOXVILLE — Principals, counselors and teachers from school systems throughout the state may attend a tuition-free Career Education Workshop July 24-Aug. 11 at the University of Tennessee here.

UTK officials said a $90,000 grant from the U.S. Office of Education will provide tuition and campus housing costs for teams composed of the principal, a counselor and two teachers from each of 27 schools — three in each of Tennessee's nine development districts.

The workshop is co-sponsored by UTK's College of Education and the Division of Continuing Education.

Professors from five departments in the College of Education will assist the school-based teams with plans for implementing career education in their schools. School personnel from all grade levels will be involved.

Deans of colleges of education throughout the state also may send representatives to observe the workshop and learn more about career education training at the college level.

Persons wishing information about team selection should contact Dr. Trudy W. Banta, 212 Claxton Educatiion Building, UT-Knoxville, Knoxville, Tenn. 37916, or call (615) 974-4165.

Banta, associate professor in UTK's Bureau of Education Research and Service, is the conference director.

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Knoxville News-Sentinel
June 30, 1978

**A CAREER** Education Workshop will be held July 24 through Aug. 11 at UT-Knoxville for principals, counselors and teachers from school systems throughout the state. The tuition-free workshop is sponsored by UTK's College of Education and the Division of Continuing Education. Contact Dr. Trudy W. Banta, 212 Claxton Education Building at UT, for further information.

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Cleveland Banner
July 3, 1978

# *Principals, Counselors*

**Principals, counselors and teachers from school systems throughout Tennessee may attend a tuition-free Career Education Workshop July 24 Aug. 11 at the University of Tennessee, Knoxville.**

**A $90,000 grant from the U.S. Office of Education will** provide tuition and campus housing costs for teams composed of the principal, a counselor and two teachers from each of 27 schools—three in each of Tennessee's nine development districts. The workshop is co-sponsored by UTK's College of Education

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

OFFICE OF THE DEAN

TELEPHONE 615-974-2201

# MEMORANDUM

TO: Departments of Education in Selected Institutions

FROM: William H. Coffield WHC

RE: Career Education Workshop, July 24 - August 11, 1978

DATE: June 30, 1978

On June 26 our Bureau of Educational Research and Service received notice from the U.S. Office of Education that a grant had been awarded to conduct a Career Education Workshop at UTK July 24 - August 11, 1978. The enclosed brochure provides pertinent details of the work for in-service professionals which has been planned.

As you may know, Tennessee's State Department of Education is just this month finalizing a State Plan for Career Education which will be sent to Washington with a request for future funding. As part of its current appropriations for education, the U.S. Congress has authorized $35 million for career education--more than triple the amount which has annually been spent on career education since 1974. This seems to be an appropriate time for our colleges of education in Tennessee to assume some leadership in the training and re-training of principals, counselors and teachers in career education techniques.

At UTK a team of seven professors representing five departments has been working for two years to develop materials and techniques for training professionals in career education. The monograph Career Education: A Framework for Teamwork, published by our Bureau of Educational Research and Service in April 1978 is one product of the team's endeavors, and the coming summer Workshop is another.

This faculty team would be pleased to share with any of your faculty members the materials they have developed and the organizational strategies they have employed to make career education a part of our pre- and in-service offerings in the College.

We invite you to send one or more faculty representatives to the Career Education Workshop July 24 - August 11. Anyone wishing to spend the entire three weeks would be most welcome, or we could suggest a period of one or more days during the Workshop which might be of special interest to a faculty member in a particular discipline.

Unfortunately, travel and per diem funds were reduced in our contract negotiations with U.S.O.E., so we are not able to offer any financial assistance for these proposed visits by faculty. Nevertheless, we believe this will be a fine staff development opportunity.

Individuals interested in visiting during the Workshop should be encouraged to contact the Project Director, Dr. Trudy W. Banta, at (615) 974-4165 or by writing her at the Bureau of Educational Research and Service, 212 Claxton Education Building, University of Tennessee, Knoxville, 37916.

## Summer Workshop Schedule

| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|---|---|---|---|---|---|
| WEEK 1<br>INTRODUCTION<br>and<br>USE OF COMMUNITY RESOURCES | July 24<br>Room G-2 Stokely Mgt. Ctr.<br>1 p.m. Registration<br>Pre-tests<br>Introduction of Team and Outline of Workshop<br>2 p.m. Presentation of State Plan<br>Discussion | 25<br>1 Introduction to Career Education-Banta<br>2 Plans for Business/Industry Sites Visits-Hanson | 26<br>11:45 Lunch with staff<br>1 TN Facilitator Project<br>McKnight Publishing<br>Additional Resources<br>2 Separate Sessions<br>Teachers w/ Turner & Murphy-HUM 53B<br>Counselors w/ Dietz & Hector-C214<br>Administrators w/ Harris-C215 | 27<br>1-3 Hanson/Banta<br>Occupational Clusters<br>Elements of Career Ed.<br>Developing Community Resources | 28<br>EMPLOYERS VIEW CAREE EDUCATION<br>1 Art Humphrey, Chas Manhattan Bank<br>2 Employer Panel |
| WEEK 2<br>MATERIALS,<br>METHODS,<br>EVALUATION | July 31<br>1 Jim Lackey, State Dept. of Employment Security<br>2-4 Separate Sessions for teachers, counselors, administrators | Aug. 1<br>1-3 Separate Sessions<br>3-4 Career Ed Materials Developed in Tennessee<br>Publishing Representatives | 2<br>1-3 Separate Sessions<br>3-4 Project INFOE-Dr. Ernest Brewer | 3<br>1-2 Sources of Bias in Career Ed Materials<br>Dr. Norma Mirtz<br>2-4 Separate Sessions | 4<br>1-2 Separate Sessions<br>2-3 Evaluation of SPAN and other CE projects in Tennessee<br>3-4 Memphis EBCE Evaluation |
| WEEK 3<br>SCHOOL PLANS<br>and<br>WORKSHOP EVALUATION | Aug. 7<br>1-4 Separate Sessions | 8<br>1-3 Separate Sessions<br>3-4 More about materials and Review of expectations for Plans due Thursday | 9<br>Banta - Hanson<br>The Future of Career Ed in the College of Education | 10<br>PLANS DUE<br>Hanson - Banta<br>Evaluation of Visits to Worksites | 11<br>Post-tests<br>Group and Individual Review of Plans<br>Scheduling of Fall follow-up meetings<br>Workshop Evaluation |

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

BUREAU OF EDUCATIONAL RESEARCH AND SERVICE

TO: Principals of Public Schools in East Tennessee

FROM: Trudy W. Banta, UTK Career Education Project Director

SUBJECT: Spring Workshop in Career Education

DATE: November 17, 1978

Enclosed is a brochure describing the course offerings in career education at the University of Tennessee, Knoxville. Please note particularly the last section of the right-hand column inside which describes our summer workshop. Emphasis is placed on developing specific administrative plans and instructional strategies for immediate implementation of career education in all subjects at all grade levels. We serve primary, middle, junior high, and secondary faculties.

Last June you may remember receiving a green brochure describing a tuition-free Career Education Workshop to be held at UTK in late July for school-based teams consisting of principal, counselor or supervisor, and two teachers. That brochure arrived during the last week of school--too late for most principals and staff to include it in their summer plans. The Workshop was held in July, but for 40 participants instead of the 100 for which funds were available.

Would you and your faculty* be interested in a 3 credit-hour, tuition-free workshop in career education if we could offer one in the Spring? If so, please complete the enclosed questionnaire by December 15 and from those which are returned we will attempt to derive information as to the best time and place for such a workshop.

We will inform you when plans for the Spring Workshop are complete. At that point you may name the specific members of your faculty who will attend.

Thank you for your interest.

---

* Priority will be given to teams which include the principal or another administrator who can provide support for faculty who wish to implement career education. However, if any faculty members want to attend, send us a positive response and we will consider that team if an insufficient number of full teams is obtained.

# CAREER EDUCATION WORKSHOP

## Spring 1979

[NOTE: A grant from the U.S. Office of Career Education makes it possible for the UTK Career Education Team to provide 3 hours of graduate credit (Educational Psychology 5790 or Curriculum and Instruction 5790) in career education concepts and techniques free of charge during 1978-79 to principals, counselors, and teachers in Tennessee.]

Dear Dr. Banta:

Yes, our school would be interested in sending a team to a tuition-free career education workshop during the spring of 1979.

Our team would probably consist of (check one):

_____ our principal, a counselor, and two teachers

_____ principal and three teachers

_____ other (please specify)

If the principal cannot attend, would he/she support implementation of a career education program by the team that attends the workshop?
_____ Yes _____ No

Our team would be most interested in attending the workshop if it were held (check a place and a time):

### PLACE

_____ on the UTK campus, with access to the library's special collection in career education

_____ at a location closer to our own school system (Can you suggest a suitable location?)

### TIME

_____ late afternoon (4:30 - 7:30p.m.) for 10 weeks during the regular Spring Quarter (March 27 - June 8, 1979)

_____ evenings (6:30 - 9:30p.m.) for 10 weeks during the regular Spring Quarter

_____ Saturday mornings (9 - 12 noon) for 10 weeks during the regular Spring Quarter

_____ for 6 hours (9 - 12 noon and 1 - 3p.m.) on each of 5 Saturdays in March - April 1979.

Signed ______________________________ Name of School ________________________

Name of School System ________________

By December 15 please return to:
Dr. Trudy W. Banta
Bureau of Educational Research and Service
212 Claxton Education Bldg.
University of Tennessee
Knoxville, TN 37916

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

BUREAU OF EDUCATIONAL RESEARCH AND SERVICE

May 1, 1979

Dear Superintendent:

IS CAREER EDUCATION AN INTEREST OF PRINCIPALS AND/OR TEACHERS (Grades K-12) IN YOUR SYSTEM?

During 1978-79 a grant from the U.S. Office of Career Education has enabled seven professors in the College of Education at the University of Tennessee, Knoxville (who have been developing career education curriculum since 1976) to offer four in-service workshops for principals, counselors, and teachers in Tennessee.

In the course of these workshops--two of which were held in Knoxville, one in Cleveland, and one in Memphis--teachers of all subjects at all grade levels were encouraged to develop lesson plans in which the teacher's own subject matter objectives could be taught by illustrating how that subject is used in one or more life roles--as family member, citizen, worker, or participant in leisure time activities.

Relating subject matter to the way it can be used in an occupation has been shown to increase student motivation to learn.

In each workshop principals and counselors have been encouraged to develop their own objectives and plans related to the support of teachers' career education plans. Counselors can help groups of students explore their own interests, values, strengths and limitations as these relate to various careers. Principals can develop linkages with parents and community which are essential to a successful career education effort. They can also assist teachers in acquiring a wide variety of information about careers. (Some of this is packaged by commerical publishers,) but much is available from business, industry and government at no cost.)

As a result of planning and conducting the in-service workshops the UTK Career Education Team has developed the following materials for distribution to schools throughout the State:

1) an annotated bibliography of commercial career education materials (based on personal review by the professors),

2) brief descriptions of the roles of teachers, counselors, principals as members of the school career education team, and

3) a series of sample lesson-plans that will assist teachers of any subject at any grade level to weave career education activities into the established curriculum.

(Career education is a set of strategies for teaching traditional subject matter; it is not an addition to existing curriculum.)

For your information, we are enclosing

- a brochure describing the UTK career education program, and
- a one-page description of the workshops conducted during 1978-79.

Finally, we are sending you a copy of a Request for Materials which you may wish to distribute to any of the principals in your system who are interested in career education. We will send up to six items free to any principal who requests them as long as our supplies last (or until June 30, when our grant period ends).

Most sincerely,

Trudy W. Banta

Trudy W. Banta
Associate Professor
Career Education Project Director

TWB/tkr

# TEAMWORK: FRAMEWORK FOR CAREER EDUCATION IN TENNESSEE

Unified concern and cooperation among school professionals is the key to implementing career education at all grade levels within the school. That is the basis for the in-service training program in career education being offered by a College of Education faculty team at the University of Tennessee, Knoxville (UTK).

Since 1976 seven professors representing all major departments in the College of Education at UTK have worked together in planning ways and means of implementing career education within the school curriculum at all levels. In 1978 the team outlined its thinking in Career Education: A Framework for Teamwork (Monograph #8, Bureau of Educational Research and Service, UTK). Articles by individual team members characterized the role of the school administrator, the counselor, and the teacher in providing a program of career education for all students.

During 1978-79 the UTK faculty team has conducted four workshops--two in Knoxville, one in Memphis, and one in Cleveland, Tennessee--for in-service teams composed of principal, counselor, and two or more teachers from schools throughout the State. Members of the UTK faculty team provide workshop participants with a view of the administrator's roles, the counselor's roles, and the teacher's roles in an integrated career education program. Such a program includes infusion of career education in the curricular objectives of each subject at every grade level in the school, utilization of community resources, and the guidance and administrative support services necessary to provide a strong foundation for infusion. The principal, counselor, and teachers are trained together and work together as a team during the workshop so that each will understand the other's functions and the practice of working together will be established for later use in the home school.

During the workshops each participating team has produced a school plan for implementing career education. The plan includes (1) a description of the school population and setting, (2) an assessment of student career education needs, (3) a set of overall school career education goals based on student needs, (4) a plan for utilizing community resources in the program, (5) delineation of the principal's role in the program, (6) a description of the counselor's role in the program, and (7) a series of teacher-made lesson plans illustrating the infusion of career education concepts in the curriculum areas in which they teach.

Before each workshop the UTK faculty team has given a pretest to determine the participants' level of understanding of career education concepts. Most of the participants have said they viewed career education as a concept to be taught in a separate course at the secondary level. Fewer than one-third have indicated that they could provide a definition of career education if asked to do so. The UTK team has considered it essential to involve the school principal as a member of the team representing his/her school. Feedback from teams that have completed the training substantiate the need for training the principal with the team: only those administrators who fully understand the career education concept are motivated to make a strong case for involving their total faculty in an integrated program.

Pre- and post-testing of workshop participants provides evidence that the workshop experience contributes to substantial gain in knowledge of concepts and positive attitudes toward career education. Moreover, the plans written during the workshop can be used immediately by all members of each team to put a career education program into immediate effect in their home school.

THE UNIVERSITY OF TENNESSEE
COLLEGE OF EDUCATION
KNOXVILLE, TENNESSEE 37916

OFFICE OF THE DEAN

TELEPHONE 615-974-2201

# MEMORANDUM

TO: Chairpersons, Departments of Education, in Selected Tennessee Institutions

FROM: William H. Coffield WHC

SUBJECT: Career Education Project at UTK

DATE: May 23, 1979

In June 1978 a team of seven UTK faculty members in our College of Education received a grant from the U.S. Office of Education to conduct career education workshops for teams of inservice professionals from throughout Tennessee.

Last July we communicated with you concerning the possibility that you might want to send one or more observers from your faculty to the workshop which the Team conducted in Knoxville July 24 - August 11. A small number of faculty members did take advantage of this opportunity and the Career Education Team members were pleased to be able to share their experience and materials with those individuals.

Now that the grant period is nearing an end, the Team would be pleased to send to any of your faculty who may be interested:

1. an "Annotated Bibliography of Commercial Career Education Materials" which was compiled during the Spring Quarter;
2. a collection of lesson-planning ideas (at all grade levels, in a variety of subject areas) prepared by teachers who have participated in two workshops in Knoxville and one in Cleveland, Tennessee;
3. a detailed description of the activities conducted by the Team during the grant year; and
4. copies of the teaching modules prepared for the workshops by the individual professors on the Team.

During the summer the State of Tennessee will receive some $300,000 in federal funds allocated under the terms of the Career Education Incentive Act. The State Career Education Coordinator indicates that most of this money will be spent for inservice education. Some of your faculty may be called on to participate as instructors in some of the workshops that are planned. (Certainly seven professors at UTK cannot provide all the technical assistance which will be needed if career education is really to become a viable curriculum influence in Tennessee!) Therefore, the Team would be pleased to share its experience with faculty from other teacher preparation institutions throughout the State.

We have enclosed a description of the federal inservice training project ("Teamwork: Framework for Career Education in Tennessee") and a brochure describing the on-going career education offerings in the College of Education at UTK.

Please share this correspondence with interested faculty and for further information have them contact:

Dr. Trudy W. Banta, Associate Professor
2046 Terrace Ave.
Knoxville, TN 37916
(Ph. 615 974-4165)

# APPENDIX F

# AIKEN EVALUATION REPORT

## AN EVALUATION OF PROCESS OBJECTIVES I & II

Submitted by William C. Aiken

"A College-Wide Team Approach to Providing Career Education Training for School-Based Teams of Principals, Counselors, and Teachers"

The purpose of this summary is to give an evaluation of Process Objectives I & II of the University of Tennessee's career education project.

Objective I: Utilize an interdisciplinary team of College of Education faculty members representing five major departments to plan the curriculum for a multi-discipline career education training program.

In order to ascertain the degree achievement for this objective, a meeting was held with the interdisciplinary team. The criteria used to determine success was an assessment of the team's ability to work together and whether or not the curriculum for the workshop was actually planned. Through observation and interviews, a number of conclusions can be drawn. The greatest single factor affecting the teams ability to work together seemed to center around the preplanning aspect of the project. Several of the team members indicated that there was an insufficient amount of lead-time in order to make sufficient plans for the workshop. Specifically, the funding cycle of the project had a detrimental effect on the team in making advanced plans for the workshop. In addition, the cycle allowed for little time in recruiting local educational agency personnel to attend the summer workshop. The project director spent a month on recruitment rather than planning. As a result, the workshop had a lower number of participants than was anticipated effecting the morale of the interdisciplinary team.

It was pointed out that no faculty time was allowed to facilitate the planning process. Likewise, the summer quarter places additional demands on faculty members in the College of Education. One must conclude that the planning process could have been greatly facilitated by discovering alternatives which would have given more time for this phase.

Several comments were made by team members concerning the cohesiveness of the team in general. One member pointed out the need for the team to show more coordination in definition and concept between the various University of Tennessee departments. Another member supported the need for better coordination saying that the team was somewhat ineffective during the workshop. This lack of uniformity among the members resulted in workshop participants interpreting what staff members said in a variety of ways. In conclusion, several team members felt that the team came closer together near the close of the workshop. Daily staff meetings to evaluate the progress of the workshop provided a means for the team members to become a more cohesive unit. Again, one must conclude that better provisions for preplanning might serve as a mechanism to overcome some of these difficulties.

At the meeting with the interdisciplinary team, copies of the modules were secured providing evidence that the curriculum for the workshop had been planned. In general, one must conclude that the use of the modules in the workshop served as a means of placing things in perspective for the team members and workshop participants. All members indicated that the modules were followed closely during the workshop. By using the modules in the workshop, team members were able to field test the approach of the module. Team members made comments such as the module contents served as advanced organizers, the module was too lengthy, the group size was inappropriate for the module, the module was not good as a self-instruction tool but ideal for the group, and various other comments.

Objective II: Integrate modules based on previously existing materials to form a comprehensive training program.

Observation and faculty interviews provided evidence that existing career education materials had been used in the development of the modules. The team members had taken specific measures to include materials developed in Tennessee. Among those materials used were the following:

| | |
|---|---|
| Anderson County Schools | Career Education materials |
| Knox County Schools | Career Education materials |
| Knoxville City Schools | guided program |
| Greeneville City Schools | Career Education specialists |
| Memphis City Schools | Career Education materials |
| Tullahoma City Schools | Career Education materials |
| Chattanooga City Schools | Career Education materials |

These materials were placed on reserve in the library making them accessible to workshop participants. In addition to the above materials, the following career education materials were utilized:

Ohio State materials
Oregon Consortium for Career Education
Texas materials

# APPENDIX G

# HEALY-SORENSON EVALUATION REPORT

**UNIVERSITY OF CALIFORNIA, LOS ANGELES**

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1868

SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF EDUCATION
GRADUATE SCHOOL OF EDUCATION
LOS ANGELES, CALIFORNIA 90024

June 5, 1979

Dr. Trudy Banta
Bureau of Educational Research
and Services
University of Tennessee
Knoxville, TN

Dear Dr. Banta:

Enclosed please find the reports which you requested from Dr. Sorenson and me about your career education project. It was most interesting to both of us to examine the project and interact with your faculty. We enjoyed it and felt that the experience will help us in our project which started on June 1. When it is available, we would appreciate receiving a copy of your final report.

Again, thank you for the opportunity of getting together with you on the project.

Sincerely,

Charles Healy

Charles Healy
Associate Professor

A:92

## Observations on Career Education Project of the Bureau of Educational Research and Service at the University of Tennessee

Charles C. Healy, Ph.D.
Associate Professor, UCLA

On May 23 and 24, 1979, Dr. Garth Sorenson and I met with Dr. Trudy Banta and the faculty of the Career Education Training Project to review their efforts and to develop ideas for extension of the project. Following are my observations about the conduct of the project. These comments are based upon an extensive discussion with Dr. Banta, a 2½-hour seminar with the project faculty, and review of course materials, plans of participating teams, other cognitive and affective outcome measures, and some pre-post data.

Overall, the project has a clear rationale and appears to have been ably and energetically managed. The theme of infusing career education was clearly defined and the instruction related to it. Participant reactions were obtained and there were on-going efforts to upgrade the program based upon the feedback from participants.

The strengths of the program are as follows:

1) A clear rationale for infusing career education was presented in the lead module and the participants were helped to appreciate and then operationalize the idea of infusing career education through constructing lesson plans. The lesson plans which I examined indicated that by the end of the workshop, participants appreciated the meaning of career education infusion.

2) Participating teams were guided in formulating a preliminary plan for offering career education based upon a needs assessment of their own school. The structure of a needs assessment enabled the participants to discover the relevance of career development for their own students and to move to address the needs they had identified. This doubtless built support for continued effort in career education, while providing the motivation of addressing needs they discovered personally.

3) The project staff have used and will continue to use feedback from delivering the workshop to upgrade future workshops. They made it mandatory that school teams be led by the principal when the importance of such leadership became manifest; they are planning to explicitly model teamwork in presenting future instruction since they believe that their manifest teamwork in the Cleveland workshop made it more effective than their other presentations; and they amassed examples of career education infusion practices for perusal and loan since participants requested such materials.

4) The project offered ongoing opportunities for consultation. The staff took the lead in initiating a consulting relation through weekly telephone calls to teams. They visited schools to help the participating teams inform their colleagues and community about career education.

5) The project staff gathered multiple data, including tests, self-reports, plans, and lesson plans, that can be used in judging the participants' progress and subsequent needs.

In any innovative instructional offering, improvement is possible. If this project is repeated, I recommend the following modifications:

1) Baseline data about the participant's pre-workshop career education infusion activities and ability to compose infusion lessons should be gathered in order to focus instruction. This would be in addition to the data about attitudes and knowledge of career development which were collected.

2) There should be a clearer linkage of all workshop units to the development of school teams and plans for infusing career education; that is, each module should specify what and how it contributes to developing a school infusion team and infusion lessons.

3) Some workshop module lesson plans should be more detailed so that persons other than their authors might deliver them. The module introducing career education is a good illustration of a detailed lesson plan.

4) Obtaining participant commitment to present the career education plan to their school faculty, or to the next higher administrative unit, would be useful. This should increase the likelihood of plan implementation. In addition, the lesson plans of the participants should explicitly provide for community interaction.

5) As noted by the project staff, workshops should be scheduled at a time when participants are fresh and can concentrate on workshop tasks as a team.

## On Evaluating Career and Work Education Workshops

Garth Sorenson, UCLA

Drs. Banta, Healy and I discussed experiences and impressions relating to the question of how to make workshops effective. The following list of suggestions summarizes at least my own impressions of what the directors of two workshop series, operating independently of one another, thought they had learned from their experiences. These conclusions are necessarily tentative, suggestive of hypotheses to be more rigorously tested on future occasions. More specifically they point to some of the variables, dependent and independent, about which project directors should plan to gather information for purposes of evaluating and improving workshops. It will be obvious that the variables are merely named here, or referred to in common English. If they are to be properly investigated they will need to be operationally defined. In other words, ways of measuring the variables will need to be developed while the workshop is still in the planning stages. Given the present state of the art, I do not believe that the "measures" will necessarily be complex, but they will need to be planned in advance of the first session of the workshop rather than after the fact.

Drs. Banta and Healy appear to agree that 8 factors seemed to have influenced the success of the workshops they have conducted within the last couple of years:

1. Selection of school districts. Districts need to be carefully selected because some are much more cooperative than others. Other things being equal, it appears that (a) small districts are more likely to be cooperative than large ones; (b) districts where there are already a number of special projects running may be less willing to find time and resources for a new project than districts which have fewer special programs; (c) rural districts may be more cooperative than urban districts.

2. Selection of individual trainees. Assuming that the purpose of the workshop is to effect changes in district practices, the trainees should be recruited as teams. Each team should include at least one school administrator as well as a teacher and a counselor. Each team should have a coordinator or leader. The team leader should be a person who knows the schools and the people in his/her geographical area and their interests and problems, and who has credibility with both the team members and the decision makers in the school and community. Probably the team leader should be a school administrator.

3. Motivation of trainees. If possible, attention should be given at the time of recruitment to the motivational factors which operate in the potential trainees. Ideally, people who have some intrinsic interest in career or work education, and who have some responsibility for these matters in their daily work, should be selected. In addition it is advisable to try to provide "extrinsic" incentives such as college credit, special recognition in the district, released time, etc.

4. Selection of the workshop staff--the presenters. In addition to being knowledgeable and competent in some aspect of career or work education, those selected to make presentations at workshops should be

   (a) able to perform enthusiastically in front of audiences--i.e., to communicate their feelings of enthusiasm about the ideas they are presenting.

   (b) able to make well organized presentations.

   (c) able to relate abstract ideas to the experiences of their trainees, e.g., to provide trainees with examples which they will recognize as relevant.

   (d) willing and able to work as a member of a team, i.e., to make their own performance a part of an integrated whole rather than merely an individual effort, willing to observe and report on one another's performance, etc.

5. The workshop staff as a model of a team. The workshop staff should not only present a model of a working team to be emulated by workshop trainees, but the staff should take the trouble to point out to the trainees the team aspect of their operations, and why the team effort is important.

6. Workshop materials. Ideally the workshop materials will include needs assessment procedures designed to provide information about the state of the trainees' knowledge, interests, and operations, that can be recorded as baseline data for evaluation purposes. (It occurs to me that these should be collected during the recruitment phase if possible).

In addition, the participants should be given handouts, such as model plans for career and work education programs, occupation information for students, examples of practices that seem to work in other schools and classrooms.

The materials presented in the workshops should be deliberately didactic, well organized, succinct.

7. Work sessions. Workshop members should meet periodically in small groups to share ideas and experiences, and reactions to the presentations. The primary purpose of these groups however should be to give practice in the application of ideas. To that end the groups should be task oriented. They should have assignments, and develop "products" which can be evaluated. These sessions should not be merely rap sessions. The teams should remain intact in these sessions--i.e., they should not be split up, with the teachers meeting together, the administrators together, etc.

8. The evaluation process should be kept in mind during both the planning of the workshop and its operation. Information should be gathered about what the participants are learning, about their attitudes, actions taken as a result of assignments, etc. Ideally,

the follow up survey would compare each trainee's attitudes and knowledge with the baseline data. It would also compare the work education efforts being made in the school district or school at the time of the survey with the baseline data.

# APPENDIX H

# HUCK-CLARK INSTRUMENT EVALUATION

# Instrument Evaluation Project
# for
# UTK Career Education Workshop

Schuyler W. Huck

Sheldon B. Clark

The University of Tennessee
Knoxville, Tennessee

June 15, 1979

## Introduction

In conjunction with efforts to assess item-specific quantitative characteristics of two instruments used within the UTK Career Education Workshops, this project has been undertaken in order to present empirical support for recommended item retention, revision, and/or deletion within each instrument. Since one of the instruments lies within the realm of norm-referenced analysis while the other lies within the realm of criterion-referenced analysis, approaches taken in evaluating them were necessarily different.

This report consists of five parts: the first two sections briefly describe each instrument, present the rationale for the analyses performed, and summarize the results of those analyses. Appendices A and B contain copies of the instruments and data which support the conclusions reached in the first two sections. Appendix C contains a guide to writing multiple-choice items.

It is imperative to remember that, as an ancillary and detached support project, this effort, and the recommendations contained within, should not be interpreted without first considering the broader context from which the test data came, and for which it represents but one area of relevant behavior.

## INSTRUMENT I
## General Introduction to Career Education

The General Introduction to Career Education test, a copy of which can be found in Appendix A, consists of twenty-five items, twenty-four of which appear in multiple-choice format, with response options ranging from four to six per item; the twenty-fifth item is a matching exercise. This criterion-referenced test was administered both as a pretest and as a posttest during three career education workshops. All calculations are based upon the 138 cases for which complete data was available.

Because techniques for analyzing criterion-referenced tests are constantly being improved, it was deemed appropriate to follow the guidelines set forth by Ronald A. Berk of The Johns Hopkins University, in a paper presented recently at the National Symposium on Educational Research. According to Berk, an expert in the field of criterion-referenced testing, the analysis of test items falls into four categories: (1) item-objective congruence, (2) item statistics, (3) item selection, and (4) item revision. While the scope of this project is necessarily limited to the latter three considerations, it is important to note that the first category, item-objective congruence, is by far the most important. It is concerned with the extent to which an item measures the instructional objective that it purports to measure. "If it cannot be stated unequivocally that the items measure the objectives, then any other characteristic becomes meaningless" (Berk, 1978, p. 5). For the purposes of this project, therefore, all analyses will presuppose that an acceptable item-objective congruence exists *a priori*.

Tables I-A and I-B in Appendix A contain summaries of item statistics for the General Introduction to Career Education test. Table I-A consists of Chi-square values and their associated probabilities, while Table I-B contains indices of Pretest Difficulty, Posttest Difficulty, Pretest-Posttest Difference, and Discrimination.

Pretest and Posttest Difficulties are the percentages of examinees who answer items correctly, while the Pretest-Posttest Difference is the percentage improvement of correct posttest responses over those of the pretest. The Discrimination Index represents the degree to which examinees select the correct response to an item as a function of the instruction received, and is computed as follows:

$$\text{Index} = \frac{f_2}{f_1 + f_2 + f_3}$$

where

$f_1$ = the number of cases that missed the item on both the pretest and the posttest

$f_2$ = the number of cases that missed the item on the pretest and answered it correctly on the posttest

$f_3$ = the number of cases that answered the item correctly on the pretest and missed it on the posttest

Note that the Discrimination Index does not consider those examinees who answered the item correctly both on the pretest and on the posttest, since their prior knowledge precludes their learning the correct response through subsequent instruction. Note also that this index makes no adjustment for guessing.

Berk recommends that items be analyzed using several different indices, if possible, and that these empirical results then be tempered through consideration of item-objective congruence. Although this final step is not possible in this case, Table I-C in Appendix A summarizes the extent to which each item fails to meet the suggested critical values.

Many of the problems revealed in this table are at least partially attributable to the large proportion of examinees who answer an item correctly on the pretest, a fact which suggests that the item is based on material that is not new to the majority of the examinees and, therefore, possibly inappropriate as a focus of instruction. More than three-fourths of respondents answered items 1, 4, 5, 13, 20, and 21 correctly on the pretest, and more than half did likewise on items 3, 6, 8, 9, 14, 16, 17, 19, 22, and 24.

The proportion of examinees correctly answering items 17, 18, and 19 did not change appreciably from the pretest to the posttest, raising a question about the effectiveness of instruction for the objectives corresponding to these items. Examinees either omitted or chose multiple responses for item 10, forty-one times during both administrations of the instrument, indicating that the item's stem needs revision.

The atypical distribution of responses for item 11 (see Table I-D in Appendix A) has several possible explanations: (1) there is more than one correct response, (2) the item is ambiguous, (3) the instruction was misleading, or (4) a combination of these factors. In addition to these possibilities, an additional consideration must be examined to identify the potential source of the abnormal response patterns in items 15 and 25 (see Table I-D in Appendix A); i.e., (5) the liklihood that the keyed response is incorrect.

As emphasized earlier, all of these item statistics must be interpreted cautiously. The ultimate decision to retain, revise, or discard a particular item should be made only after evaluating the item in terms of the degree to which it is judged to be congruent with the stated instructional objectives and in light of the relative importance of the objective to which it relates.

Though it is defensible to use the statistical analyses contained herein as a means of identifying possible problems within the items themselves, the reader is once again advised against using them as the sole criterion for classifying the relative worth of an item.

## INSTRUMENT II

## Attitudes Toward Career Education Concepts

The Attitudes Toward Career Education Concepts instrument, a copy of which can be found in Appendix B, consists of thirty-one statements concerning career education, using a Likert-type response format. The inventory was administered at the beginning of two career education workshops and again upon their completion.

All ninety-five cases which had good data were used in the calculations that were performed. Because the changes in response patterns from the pretest to the posttest were so drastic (see Table II-A in Appendix B), and since the posttest responses tended to cluster at the "desired" end of the scale, it was determined that subjecting the posttest responses to rigorous reliability studies and item analyses would yield artificially negative results, due to the small variation in response patterns. For this reason, the reported measures of reliability and inter-item correlation are based only upon the pretest data. These statistics were obtained primarily through the use of the Purdue Instrument Analysis System, a software package which produces a plethora of descriptive and reliability measures.

Using the formula,

$$\text{Reliability} = \frac{k\ r}{1 + (k-1)r} ,$$

in which k = the number of items in the instrument, and r = the average inter-item correlation coefficient, it is possible to take into account both the stability (reflected in k) and internal consistency (reflected in r) of the instrument. Using all thirty-one items, the coefficient of reliability is .8301 (this coefficient is based upon standardized item values, calculated by dividing the observed item value by the standard deviation for that item).

Table II-B in Appendix B summarizes the item analysis for this inventory, each item being ranked according to its relative contribution to Cronbach's alpha. The data contained in this table indicate that the reliability coefficient could be maximized by eliminating items 6, 11, 20, 25, 27, and 31, since they appear to have a negative effect on the internal consistency of the instrument. Not only would this combination of items be more efficient in terms of time and materials, but also such an instrument would have slightly larger reliability coefficient of .8454.

For these reasons it is recommended that consideration be given to the elimination of those items identified as making questionable statistical contributions to the overall instrument. As is consonant with sound instrument-development techniques, the resulting inventory should be field-tested and re-analyzed to determine the appropriateness of such changes.

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# Appendix A

Name ______________________

UTK Career Education Workshop

## POST-TEST FOR GENERAL INTRODUCTION TO CAREER EDUCATION

Please CIRCLE your response to each item.

1. What percentage of today's employment opportunities do not require a college education?
   A) 10% B) 20% C) 80% D) 90%

2. Which of the following is NOT a public concern which contributed to the emergence of career education in the early 1970's?
   A) American education had met best the needs of that minority of students who would attend college, failing to place sufficient emphasis on the educational needs of students who would leave the educational system during or immediately after high school.

   B) Education had not received the amount of funds needed to graduate qualified job applicants.

   C) American education had not met the needs of minority or economically disadvantaged persons in the society.

   D) Schools had placed too little emphasis on the relationship between what students were asked to learn in school and what they would do when they left the educational system.

3. Which of the following statements is an accepted and/or official definition of career education?
   A) Career education is a comprehensive educational approach to the preparation of the citizenry for living as fulfilled human beings in a predominantly technical, specialized society.

   B) Career education is a curricular reform in which the central focus of teaching and learning in all subjects is the future careers of students.

   C) Career education is a systematic way to acquaint students with the world of work in the elementary and junior high years and to prepare them in high school and post-high school to enter and advance in a career field carefully chosen from among many; for adults, it is a way to re-enter the school and upgrade their skills in an established field.

   D) Career education is an effort aimed at refocusing American education and the actions of the broader community in ways that will help individuals acquire and utilize the knowledge, skills, and attitudes necessary for each to make work a meaningful, productive, satisfying part of his or her way of living."

   E) All of the above.

   F) None of the above.

4. Career education is a concept which embraces:
   - A) Self-awareness activities
   - B) Occupational information
   - C) Vocational-technical education
   - D) Academic subjects
   - E) None of the above
   - F) All of the above

5. Career education is the responsibility of
   - A) Vocational teachers
   - B) Counselors
   - C) Academic teachers
   - D) Career education coordinators
   - E) The total instructional staff
   - F) None of the above

6. Who is presently Director of the U.S. Office of Career Education?
   - A) Ernest Boyer
   - B) Terrell Bell
   - C) Kenneth Hoyt
   - D) Sidney Marland

7. Who is presently Director of Career Education in Tennessee?
   - A) Jerry Gaither
   - B) Yvonne Smith
   - C) Sadie Chandler
   - D) John Armes

8. Which of the following models was designed to provide academic instruction in an alternative setting for youth 13-18 years of age who were not functioning well in a traditional school setting?
   - A) Home/community-based model
   - B) Rural/residential model
   - C) Experience-based model
   - D) Government/business-based model

9. Match each level of the Developmental Career Ladder with its appropriate characteristics

| | |
|---|---|
| A) Awareness | C) Exploration |
| B) Specialization | D) Preparation |

_____Describes grades 7-9; involves personal decision-making, helps students integrate work values into their personal value system.

_____Describes post-high school and adult career education, involves developing specific occupational knowledge and preparation for employment or necessary retraining and up-grading skills.

_____Describes grades 10-12; involves student participation in work experiences to help them gain occupational skills and knowledge necessary for entry-level employment.

_____Describes grades K-6; attempts to help all students become familiar with the variety of work values of a work-oriented society.

10. Which of the following cluster areas is used in grades K-3?

| | |
|---|---|
| A) Services | D) Transportation |
| B) Industry | E) Product services |
| C) Social science | F) Personal services |

11. The most effective method for linking the community and school in a career education program is through:
    A) More vicarious (teacher explained) experiences to which the student can relate

    B) Field trips into the community

    C) Discussions with the class about what their parents' occupations are

    D) Visits to a school official, labor, business and community leaders to enlist their support and assistance

12. Which of the following references would best meet the needs of a class interested in obtaining the job description, entry requirements, and worker characteristics of a wide variety of occupations that interested them?
    A) USOE Career Education Monographs

    B) Dictionary of Occupational Titles

    C) Occupational Outlook Handbook

    D) Standard Industrial Classification System

13. One of the prime duties of the administrator involved in career education is:
    A) Alienation

    B) Input overload

    C) Formulate and administer policy regarding career education

    D) "Don't make waves" - use a "walking on egg shells" approach

14. Which of the following does not involve the administrator in a program of career education?
    A) Goal determination

    B) Liaison with federal politicians

    C) Program evaluation

    D) Public relations

15. Which of the following statements does not support career education?
    A) Coordination between central office and building level administration

    B) Staffing duties

    C) Coordination of service and support efforts

    D) Obtaining leaders from the community

16. Which of the following statements is true?
    A) It is necessary to evaluate career education.

    B) Career education programs are closely aligned with the nation's economy.

    C) Administrators are responsible for fiscal matters pertaining to career education.

    D) All of the above.

17. Career education instruction should:
    A) Be supervised by the administrator;

    B) Be evaluated by the administrator;

    C) Be planned by both the administration and instructional staff;

    D) All of the above.

18. Which of the following is most likely to be true if career education concepts are truly infused into curriculum?
    A) Academic success becomes more important to students

    B) Academic success goals are replaced by career goals

    C) Academic standards are lowered

    D) Academic subjects become more challenging

    E) Academic standards are raised.

19. Which of the following best describes an opportunity for infusion to occur?

    A) An auto repair course for boys and girls who want to become mechanics

    B) A "Career Day" held annually at a school during which students visit with employers

    C) A "Business English" course

    D) A social studies class

    E) An unstructured homeroom period

20. "Admiration Ladders," "Priority Setting," and similar teaching strategies often used in career education are technically referred to as:

    A) Inquiry

    B) Values Clarification

    C) Simulation games

    D) Reinforcement Drills

    E) Time-Wasters

21. Which is most desirable if career education is infused into the academic curriculum?

    A) Academic success goals are replaced by career education goals.

    B) Achievement of academic success goals is enhanced by career education goals.

    C) Academic standards are lowered.

    D) Academic standards are raised

    E) Academic subjects become more challenging.

22. Which of the following would be most central to the aims of infused career education at all levels?

    A) On the job training

    B) Vocational specialization

    C) Choosing academic content exclusively on the basis of its relationship to career goals

    D) Focusing on that content in academic areas which specifically relates to the world of work.

23. In the Integrated Model for Career Development, career exploration and decision-making takes place in grades

    A) K-6

    B) 7-9

    C) 10-12

    D) 12-Adult

24. The main thrust of career development education comes through the:

| | |
|---|---|
| A) Curriculum | C) Special services |
| B) Guidance services | D) State Department of Education |

25. Which of the following phrases does not identify one of the four major counselor functions in career education programs as enumerated by Hoyt?
    - A) Consultation with teachers.
    - B) Coordination with vocational skills training programs.
    - C) Liaison with the business/labor/industry community.
    - D) Informing parents about the career education program.
    - E) Counseling with students.

## TABLE I-A

### Chi-Square Analyses - Pretest Versus Posttest

| Item | Chi-Square Value | Probability of Chi-Square Value* |
|---|---|---|
| 1 | 3.462 | .4837 |
| 2 | 33.293 | .0001 |
| 3 | 13.233 | .0666 |
| 4 | 11.456 | .0431 |
| 5 | 7.762 | .2561 |
| 6 | 71.789 | .0001 |
| 7 | 192.449 | .0001 |
| 8 | 24.296 | .0002 |
| 9 | 19.920 | .0001 |
| 10 | 42.174 | .0001 |
| 11 | 6.953 | .2241 |
| 12 | 25.415 | .0001 |
| 13 | 4.786 | .1881 |
| 14 | 13.641 | .0045 |
| 15 | 8.364 | .0757 |
| 16 | 13.549 | .0089 |
| 17 | 1.680 | .7944 |
| 18 | 12.705 | .0480 |
| 19 | 55.357 | .0001 |
| 20 | 7.708 | .2603 |
| 21 | 1.081 | .9558 |
| 22 | 32.209 | .0001 |
| 23 | 59.472 | .0001 |
| 24 | 22.085 | .0012 |
| 25 | 37.496 | .0001 |

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*Under the null hypothesis that there is no difference between the pretest and posttest responses.

TABLE I-B

| Item | Pretest Difficulty | Posttest Difficulty | Pretest-Posttest Difference | Discrimination Index |
|---|---|---|---|---|
| 1 | .7826 | .8333 | .0507 | .8666 |
| 2 | .3188 | .6449 | .3260 | .5744 |
| 3 | .6086 | .7318 | .1231 | .7222 |
| 4 | .8768 | .9347 | .0579 | .8823 |
| 5 | .9348 | .9710 | .0362 | 1.0000 |
| 6 | .5579 | .9855 | .4275 | .9836 |
| 7 | .1594 | .9855 | .8261 | .9827 |
| 8 | .6159 | .7681 | .1521 | .6415 |
| 9 | .7173 | .9130 | .1956 | .8974 |
| 10 | .2173 | .5362 | .3188 | .4907 |
| 11 | .5072 | .4057 | -.1014 | .2794 |
| 12 | .2608 | .4637 | .2029 | .4215 |
| 13 | .9275 | .9782 | .0507 | .8000 |
| 14 | .7246 | .8913 | .1666 | .8684 |
| 15 | .0724 | .0362 | -.0362 | .0234 |
| 16 | .7318 | .8840 | .1521 | .7297 |
| 17 | .6304 | .6811 | .0507 | .6078 |
| 18 | .3623 | .4202 | .0579 | .3295 |
| 19 | .0724 | .4275 | .3550 | .3984 |
| 20 | .7101 | .8260 | .1159 | .6750 |
| 21 | .8623 | .8695 | .0072 | .8421 |
| 22 | .6449 | .9130 | .2681 | .7959 |
| 23 | .4057 | .8333 | .4275 | .7804 |
| 24 | .5072 | .7101 | .2029 | .5441 |
| 25 | .0507 | .0652 | .0144 | .0610 |

## TABLE I-C

## Violations of Suggested Cutoffs

| | -----------Criterion For Cutoff----------- | | | | |
|---|---|---|---|---|---|
| Item | Pretest[1] Difficulty | Postest[2] Difficulty | Discrimination[3] Index | PPD[4] | Chi-Square[5] |
| 1 | x | | | x | x |
| 2 | | x | | | |
| 3 | x | | | | x |
| 4 | x | | | x | |
| 5 | x | | | x | x |
| 6 | x | | | | |
| 7 | | | | | |
| 8 | x | | | | |
| 9 | x | | | | |
| 10 | | x | x | | |
| 11 | x | x | x | x | x |
| 12 | | x | x | | |
| 13 | x | | | x | x |
| 14 | x | | | | |
| 15 | | x | x | x | x |
| 16 | x | | | | |
| 17 | x | x | | x | x |
| 18 | | x | x | x | |
| 19 | | x | x | | |
| 20 | x | | | | x |
| 21 | x | | | x | x |
| 22 | x | | | | |
| 23 | | | | | |
| 24 | x | | | | |
| 25 | | x | x | x | |

---

[1] value greater than .50 (Perfect item = 0.0)

[2] value less than .70 (Perfect item = 1.0)

[3] value less than .50 (Perfect item = 1.0)

[4] value less than .10 (Perfect item = 1.0)

[5] value greater than .05 (Perfect item = 0.0000)

TABLE I-D

| Item | Group | Response Choice A | B* | C | D | Omits | Multiple Responses | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 11 | Pretest | 7 | 70 | 3 | 54 | 3 | 1 | 138 |
| | Posttest | 5 | 56 | 6 | 70 | 1 | 0 | 138 |
| | TOTAL | 12 | 126 | 9 | 124 | 4 | 1 | 276 |

| Item | Group | Response Choice A | B | C | D* | Omits | TOTAL |
|---|---|---|---|---|---|---|---|
| 15 | Pretest | 51 | 69 | 5 | 10 | 3 | 138 |
| | Posttest | 35 | 84 | 11 | 5 | 3 | 138 |
| | TOTAL | 86 | 153 | 16 | 15 | 6 | 276 |

| Item | Group | Response Choice A | B | C | D | E* | Omits | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 25 | Pretest | 19 | 27 | 40 | 40 | 7 | 5 | 138 |
| | Posttest | 16 | 72 | 23 | 17 | 9 | 1 | 138 |
| | TOTAL | 35 | 99 | 63 | 57 | 16 | 6 | 276 |

---

*Indicates keyed response

TABLE I-E

| Item | % Correct Responses Pretest | % Correct Responses Posttest |
|---|---|---|
| 1 | 78.26 | 83.33 |
| 2 | 31.88 | 64.49 |
| 3 | 60.87 | 73.19 |
| 4 | 87.68 | 93.48 |
| 5 | 93.48 | 97.10 |
| 6 | 55.80 | 98.55 |
| 7 | 15.94 | 98.55 |
| 8 | 61.59 | 76.81 |
| 9 | 71.74 | 91.30 |
| 10 | 21.74 | 53.62 |
| 11 | 50.72 | 40.58 |
| 12 | 26.09 | 46.38 |
| 13 | 92.75 | 97.83 |
| 14 | 72.46 | 89.13 |
| 15 | 7.25 | 3.62 |
| 16 | 73.19 | 88.41 |
| 17 | 63.04 | 68.12 |
| 18 | 36.23 | 42.03 |
| 19 | 7.25 | 42.75 |
| 20 | 71.01 | 82.61 |
| 21 | 86.23 | 86.96 |
| 22 | 64.49 | 91.30 |
| 23 | 40.58 | 83.33 |
| 24 | 50.72 | 71.01 |
| 25 | 5.07 | 6.52 |

# Appendix B

(1-2) Form 01
(3-5) ID ___

Name ____________________

UTK Career Education Workshop

## ATTITUDES TOWARD CAREER EDUCATION CONCEPTS

Adapted from Career Education Staff Development Materials
Prepared by The Center for Vocational Education-The Ohio State University

DIRECTIONS: Please circle the response which indicates the extent of your agreement or disagreement with each of the following statements about career education.

| | | Strongly agree<br>SA<br>(4) | Agree<br>A<br>(3) | Neither agree nor disagree<br>N | Disagree<br>D<br>(2) | Strongly disagree<br>SD<br>(1) |
|---|---|---|---|---|---|---|
| 1. | Learning in career education is not reserved for the classroom, but utilizes home, community, business, industry and other available resources. . . . . . . | SA | A | N | D | SD |
| 2. | Career education emphasizes a developmental continuum of educational experiences beginning in early childhood and extending into adulthood . . . | SA | A | N | D | SD |
| 3. | Every student should have at least one paying job before graduating from high school. . . . . . . . . | SA | A | N | D | SD |
| 4. | Identification of career information resources is an essential activity in the student's decision-making process. . . . . . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 5. | Students should understand the relationship of their present and future occupational status in relation to the economic trends and projections within the nation, state, and community. . . . . . | SA | A | N | D | SD |
| 6. | Most local business and professional people would be willing to help with a career education program in the schools. . . . . . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 7. | Career education provides an opportunity for students to acquire knowledge and skills that will be applicable in choosing careers both in the immediate future and in later adult life. . . . . . . . . | SA | A | N | D | SD |

(1-2) Form 01
(3-5) ID _ _ _

Name____________________

| | | SA (4) | A (3) | N | D (2) | SD (1) |
|---|---|---|---|---|---|---|
| 8. | Children can be introduced to ideas about working for a living and to realities of wage earning in the elementary school. . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 9. | A career education orientation is especially relevant to students with special needs and learning disabilities. . . . . . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 10. | Objectives of career education are congruent with those of education generally.. . . . . . . . . . . . . | SA | A | N | D | SD |
| 11. | A low-priority career education objective is understanding the relationship among personal economics, life-style and occupational roles. . . . . . . . . . | SA | A | N | D | SD |
| 12. | Career education provides a unifying thread that increases the relevance of academic instruction. . . | SA | A | N | D | SD |
| 13. | Career education should be the responsibility of a special teacher or counselor rather than classroom teachers.. . . . . . . . . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 14. | A key objective of career education is to enable the individual to function effectively and be responsible for personal wants and needs. . . . . . | SA | A | N | D | SD |
| 15. | An integral part of the career education concept is the emphasis on attitudes toward work and informed decision-making. . . . . . . . . . . . . . . . . . | SA | A | N | D | SD |
| 16. | When career education is emphasized in the curriculum the nature of the learner becomes the focus rather than a body of content. . . . . . . . . . . | SA | A | N | D | SD |
| 17. | Elementary school is too early for a student to start thinking about career possibilities. . . . . . | SA | A | N | D | SD |
| 18. | Career education is for all students including those with special needs and those who intend to continue their education beyond high school. . . . . . . . . | SA | A | N | D | SD |
| 19. | Career education should be available to students from kindergarten through grade 12. . . . . . . . . | SA | A | N | D | SD |

(1-2) Form 01
(3-5) ID _ _ _

Name____________________

SA A N D SD
(4) (3) (2) (1)

20. The regular classroom teacher is able to provide pupils with occupational and career information while teaching subject matter. . . . . . . . . . . . . . . . SA A N D SD

21. Career education includes the development of skills and attitudes which are integral parts of developing one's life style, including leisure pursuits, family life, and retirement. . . . . . . . . . . . . . . . . . SA A N D SD

22. Career education prepares individuals for college as well as employment. . . . . . . . . . . . . . . . . . . . .SA A N D SD

23. Every student leaving high school should have a saleable skill or should be prepared to make a meaningful choice about his/her career, i.e., further education, training, etc. . . . . . . . . . . . . . . . . . . . . SA A N D SD

24. An effective program of career education would lower the school dropout rate. . . . . . . . . . . . . . . . . SA A N D SD

25. Career education is another name for vocational education. . . . . . . . . . . . . . . . . . . . . . . . SA A N D SD

26. The quality of education would be improved by an emphasis on jobs and work. . . . . . . . . . . . . . . . . .SA A N D SD

27. The present high school vocational education courses teach students enough about the world of work. . . . SA A N D SD

28. Students should be told about different jobs and job requirements during the study of every subject at every grade level. . . . . . . . . . . . . . . . . . . . SA A N D SD

29. Vocational education is included within the concept of career education. . . . . . . . . . . . . . . . . . . . .SA A N D SD

30. Each teacher has the responsibility to emphasize the contribution of his/her teaching assignment to career development, regardless of level or discipline. . . SA A N D SD

31. Career education programs encourage students to make a career choice before entering high school. . . . . SA A N D SD

## TABLE II-A

### Results of t-tests - Pretest versus Posttest

| Item | # of Cases | t-value | Probability of t (two-tailed) |
|---|---|---|---|
| 1 | 95 | -2.08 | .041 |
| 2 | 93 | -5.58 | .000 |
| 3 | 55 | -0.62 | .537 |
| 4 | 86 | -2.61 | .011 |
| 5 | 88 | -1.49 | .140 |
| 6 | 72 | -4.53 | .000 |
| 7 | 95 | -5.74 | .000 |
| 8 | 89 | -3.51 | .001 |
| 9 | 83 | -3.64 | .000 |
| 10 | 83 | -8.34 | .000 |
| 11 | 62 | 2.61 | .011 |
| 12 | 87 | -4.71 | .000 |
| 13 | 85 | 6.21 | .000 |
| 14 | 85 | -2.83 | .006 |
| 15 | 91 | -4.14 | .000 |
| 16 | 63 | -2.51 | .015 |
| 17 | 90 | 4.72 | .000 |
| 18 | 93 | -5.52 | .000 |
| 19 | 90 | -7.01 | .000 |
| 20 | 85 | -7.17 | .000 |
| 21 | 87 | -6.62 | .000 |
| 22 | 86 | -5.03 | .000 |
| 23 | 88 | -2.29 | .024 |
| 24 | 85 | -2.95 | .004 |
| 25 | 72 | 9.68 | .000 |
| 26 | 50 | -1.63 | .109 |
| 27 | 78 | 4.61 | .000 |
| 28 | 66 | -4.24 | .000 |
| 29 | 78 | -6.87 | .000 |
| 30 | 70 | -4.72 | .000 |
| 31 | 62 | -0.42 | .678 |

TABLE II-B

Rank Order of Each Item by its Degree of Contribution to the Cronbach's Alpha Reliability Coefficient

| Item | Rank Order | Average Correlation with Other Items |
|---|---|---|
| 1 | 18 | .1295 |
| 2 | 9 | .1785 |
| 3 | 24 | .0988 |
| 4 | 21 | .1178 |
| 5 | 25 | .0929 |
| 6 | 30 | .0194* |
| 7 | 8 | .1803 |
| 8 | 7 | .1897 |
| 9 | 19 | .1256 |
| 10 | 11 | .1588 |
| 11 | 29 | .0690* |
| 12 | 10 | .1769 |
| 13 | 17 | .1329 |
| 14 | 14 | .1384 |
| 15 | 4 | .2082 |
| 16 | 2 | .2109 |
| 17 | 3 | .2097 |
| 18 | 5 | .1993 |
| 19 | 1 | .2156 |
| 20 | 27 | .0860* |
| 21 | 6 | .1916 |
| 22 | 12 | .1545 |
| 23 | 13 | .1422 |
| 24 | 22 | .1153 |
| 25 | 28 | .0810* |
| 26 | 23 | .1067 |
| 27 | 26 | .0927* |
| 28 | 20 | .1180 |
| 29 | 15 | .1348 |
| 30 | 16 | .1343 |
| 31 | 31 | .0104* |

---

*Indicates that the item's average correlation with other items is significantly lower ($\alpha = .05$) than the avearge inter-item correlation coefficient (.1361) and the item contributes negatively to the cumulative Cronbach's alpha when added according to rank.

By excluding all of these items, Cronbach's alpha would be maximized at .8454, using the 25 items that remain; this corresponds to an alpha of .8301, using all thirty-one items.

# Appendix C

# TIPS FOR WRITING MULTIPLE-CHOICE ITEMS

Three technical terms are used at times within this "TIPS" document. The term "stem" refers to the portion of a M-C item which precedes the available answers. Each of the available answers is called a "response alternative." And the wrong answers, among the response alternatives, are called "distractors."

1. The stem should clearly formulate a problem.
To see whether you have set up your M-C item correctly, cover the response alternatives and look at the stem by itself. It should be complete enough to serve as a short-answer item.

original: South America
a) is a flat, arid country.
b) imports coffee from the United States
c) has a larger population than the United States.
d) was settled mainly by colonists from Spain.
improved: Most of South America was settled by colonists from
a) England.
b) France.
c) Holland.
d) Spain.

2. Include as much of the item as possible in the stem.

original: Which is the best definition for a vein?
a) A blood vessel carrying blood going to the heart.
b) A blood vessel carrying blue blood.
c) A blood vessel carrying impure blood.
d) A blood vessel carrying blood from one heart chamber to a different heart chamber.
improved: A vein is a blood vessel carrying
a) blood going to the heart.
b) blue blood.
c) impure blood.
d) blood from one heart chamber to a different heart chamber.

3. Use the negative format in the stem sparingly; if it is used, the negative word or phrase should be underlined or capitalized (or both).
It is relatively easy to construct items which require the examinee to pick an answer that is (a) not true or characteristic, (b) the exception to some rule, or (c) infrequent in occurrence. However, such items tend to be confusing, and in many instances a competent examinee will miss the item because he/she did not perceive the negative thrust of the stem.

4. Beware of unintentional grammatical cues.
Make certain that all response alternatives are fully correct in terms of the internal grammatical structure of the item. Common errors involve (a) the use of "a" or "an" at the end of an incomplete-sentence stem, and (b) verb tense. Consider this item:

The part of speech that tells "how," "when," or "where" is an
a) noun　　d) conjunction
b) pronoun　　e) verb
c) adverb

improved: To increase the reliability of a multiple-choice test, one could
a) increase the number of items.
b) give 2 points credit (rather than 1 point) for each correct answer.
c) print just one test item on each page of the test booklet.
d) make sure that the test contains an even number of items.

9. Avoid using "all of the above" or "none of the above" as response alternatives. These response alternatives are usually thrown in after the test constructor encounters difficulty developing a third (or fourth) distractor. Test authorities advise against using "all of the above" as a correct answer because it will often be selected by examinees who can correctly evaluate some--but not all--of the other response alternatives; it is a poor distractor because examinees can eliminate it as soon as they rule out any of the other possible answers. The use of "none of the above" is defensible only when a clearly correct answer has been left out (for example, in items where the other answers present correct spellings of a word or numerical answer); it is not recommended (a) as the correct answer in items where the response alternatives vary in their degree of "correctness" or (b) as a distractor.

10. Do not put "two of the above" (if it is the right answer) as the final response alternative. If "two of the above" is the correct answer, it means that two of the initial response alternatives, if considered in isolation of the other response alternatives, constitute correct answers to the problem presented in the stem or correct ways to complete the stem's incomplete sentence. When a competent examinee comes to the first of these two "correct" answers, he/she may stop reading and mark the answer sheet without ever noticing the other "correct" answer or the truly correct response: "two of the above." To help ensure that the well-prepared student does earn credit for such an item, substitute "two of the below" for "two of the above" (and, of course, put it as the first response option). By so doing, each examinee will be alerted to the possibility that two of the remaining responses may seem correct.

11. Do not present response alternatives in "tandem" fashion. Instead of stringing the response alternatives out from left-to-right across the page (a "tandem" arrangement), present them in a column beneath the stem.

original: If the standard deviation is equal to 4, the variance will be equal to
a) .4   b) 2   c) 4   d) 16   e) 40

improved: If the standard deviation is equal to 4, the variance will be equal to
a) .4
b) 2
c) 4
d) 16
e) 40

It could be improved by changing the last word in the stem to "a(n)" or by ending the stem with the word "is" and putting either "a" or "an" at the beginning of each response alternative.

5. Do not attempt to teach examinees something new in the stem.
The primary purpose of a test is to measure student achievement. While much learning may occur during the process of taking a test, deliberate inclusion of instructional materials is not a good policy to follow. It is, of course, perfectly all right to describe novel situations and then ask examinees to apply their previously acquired skills when selecting a response alternative. But you should not attempt to provide new skills or insights during the test. Simply stated, teaching should precede testing.

6. If an incomplete sentence is used in the stem instead of a direct question, place the incomplete part at the end rather than the beginning of the stem.

original: ________ is the meaning of the term "embargo."
a) A kind of boat
b) An embankment
c) A foolish adventure
d) A law or regulation

improved: An embargo is
a) A kind of boat
b) An embankment
c) A foolish adventure
d) A law or regulation

7. Get to the main point as quickly as possible in the stem.
Since time is a precious commodity during a testing session, one should avoid couching the main point of an item within an unnecessary "story." Scores on the entire test will be more reliable and valid if students spend time answering additional items rather than reading the type of "window dressing" that appears in this item:

While ironing her new dress, Jane burned her hand accidentally on the hot iron. This was due to a transfer of heat by
a) absorption
b) conduction
c) convection
d) radiation

8. Be careful when using one pair of "opposites" as two of the response alternatives.
When two of the response alternatives constitute a pair of "opposites," many naive examinees will guess between these two options (believing that both cannot be wrong). For this reason, you should (a) make certain that the correct answer is not found within the pair of opposites, or (b) eliminate one of the responses that comprise the pair, or (c) include two pair of opposites among the response alternatives.

original: To increase the reliability of a multiple-choice test, one could
a) increase the number of items.
b) decrease the number of items.
c) give 2 points credit (rather than 1 point) for each correct answer.
d) print just one test item on each page of the test booklet.

12. If you wish, vary the number of response alternatives.
There is no law that says you must have four (or five) response alternatives for each and every item in your test. Feel free to have a varying number of response alternatives, and refrain from including silly or implausible distractors (or "all of the above" or "none of the above") simply to maintain the same number of respondents across all items.

13. Don't allow the correct answer to "stand out" because of its length.
Many test constructors have the tendency to make the correct answer longer than the distractors. This is because qualification, in many instances, needs to be inserted in the correct answer in order to make it correct. However, if an ill-prepared student notices this characteristic in a few items where he/she knows the right answer, that student will be able to select the correct answer to other items without understanding what the stem and response alternatives say. For this reason, the correct answers should not be consistently longer (or consistently shorter) than the distractors.

14. Be careful in the use of response alternatives specifying numerical limits.
Consider the following item:

Correlation coefficients can assume values anywhere between
a) 0 and +1.
b) 0 and -1.
c) +1 and -1.
d) +10 and -10.

While the correct answer on the teacher's key is "c," in reality any of the first 3 response alternatives can be defended as being correct. To improve this item, either the stem should be revised so as to ask specifically for the upper and lower limits or the distractors should be revised such that none of them specifies a segment of the true range.

15. Arrange the response alternatives in a logical order, if one exists.
If the response options are numerical values, arrange them from smallest to largest (or vice versa). If the response options are single words or names, arrange them alphabetically.

16. If your response alternatives are numbers, use letters to label the various choices.

original: To obtain a "coefficient of stability," how many forms of a test must one utilize?
1) 0
2) 1
3) 2
4) 3

improved: To obtain a "coefficient of stability," how many forms of a test must one utilize?
a) 0
b) 1
c) 2
d) 3

Of course, the same labelling system for response alternatives should be used for all items in the test. (Note: Even if you're using pre-printed answer sheets that have the answer positions labelled with numbers, you should still use letters as labels in the test if your response alternatives in some or all items are numerical; it is much easier for students to transfer their choice of answer "b" to the answer sheet position of 2 than it is for them to end up with 1 as their answer, find it in position 2, and then mark 2 on the answer sheet.)

17. A pattern of correct answers should be avoided.
Many test constructors want their examinees to consider and reject most or all of the distractors before they encounter the correct answer. Hence, they systematically put the correct answer at or near the end of the list of response alternatives. A few instructors tend to put the correct answer early in the list. And some vary the placement of the correct answer across items according to some simple pattern such as abcdabcd.... Test authorities argue against using any of these plans. Instead, the experts recommend distributing the correct answers in a random fashion across the response positions, with no one position being overly weighted (or under weighted) in terms of its "affiliation" with correct answers.

18. All distractors should seem attractive to the ill-prepared examinee.
Creating good distractors is a difficult task. Nonetheless, poor distractors simply take up time and space without serving any function. Usually, distractors are superior if they, along with the correct answer, constitute a homogeneous set of ideas.

original: To what did the title of the Broadway musical *Top Banana* refer?
a) The annual contest for the best looking banana.
b) The superior quality of the bananas which grocers use to cover up others of inferior quality.
c) A new yellow toy which spins around on the ground.
d) The leading comedian in a burlesque theater.

improved: To what did the title of the Broadway musical *Top Banana* refer?
a) The dictator of a Central American country.
b) The warden of a penitentiary.
c) The president of a large fruit company.
d) The leading comedian in a burlesque theater.

Do not include funny distractors for the purpose of entertaining your students or relieving their test anxiety. Most students consider their test to be a very serious matter, and you do not want to give the impression that you consider it lightly. Tell your jokes somewhere else.

19. Do not ask for the examinee's opinion.

original: In your opinion, which of the following reliability procedures should high school teachers be encouraged to use in evaluating their classroom tests?
a) test-retest
b) parallel-forms
c) split-half
d) Kuder-Richardson #20

improved: Considering the criteria of "practicality" and "simplicity," which of the following reliability procedures should high school teachers be advised to use in evaluating their classroom tests?
a) test-retest
b) parallel-forms
c) split-half
d) Kuder-Richardson #20

# APPENDIX J

## "PRE-WORKSHOP NEEDS ASSESSMENT" AND "CAREER EDUCATION WORKSHOP EVALUATION"

Your Name ____________

Your Position ____________

## UTK Career Education Workshop

## PRE-WORKSHOP NEEDS ASSESSMENT

Your responses to the following questions will help to shape the content of the GENERAL workshop sessions. So please respond honestly to each item.

1. Which of the following statements best describes your awareness of career education definitions? (Check all that apply)

My school system has adopted a definition. . . . . . . (1) ________
My school has adopted a definition. . . . . . . . . . . (2) ________
I have my own personal definition, based on reading and experience. . . . . . . . . . . . . . . . . . . . . . (3) ________
I have little or no acquaintance with definitions of career education. . . . . . . . . . . . . . . . . . . . (4) ________

FOR ALL QUESTIONS WHICH FOLLOW, MARK ONLY ONE ANSWER

2. Career education should be given most emphasis in

Elementary school. . . . . . . . . . . . . . . . . . . . . (1) ________
Middle or junior high school. . . . . . . . . . . . . . (2) ________
High school. . . . . . . . . . . . . . . . . . . . . . . . (3) ________
Kindergarten through high school. . . . . . . . . . . (4) ________
Don't know. . . . . . . . . . . . . . . . . . . . . . . . (5) ________

3. It is most important to emphasize career education concepts in:

The social studies and/or English curricula. . . . . . (1) ________
The math and/or science curricula. . . . . . . . . . . (2) ________
The vocational and/or technical skills curricula. . . (3) ________
The art and/or music curricula. . . . . . . . . . . . . (4) ________
A special career education course. . . . . . . . . . . (5) ________
All subject matter curricula. . . . . . . . . . . . . . (6) ________
Don't know. . . . . . . . . . . . . . . . . . . . . . . . (7) ________

4. If I were asked to explain the infusion process to teachers unfamiliar with career education, I would find this:

Very easy. . . . . . . . . . . . . . . . . . . . . . . . . (1) ________
Fairly easy. . . . . . . . . . . . . . . . . . . . . . . . (2) ________
Fairly difficult. . . . . . . . . . . . . . . . . . . . . (3) ________
Very difficult. . . . . . . . . . . . . . . . . . . . . . (4) ________

5. The historical development of the career education concept is:

Very familiar to me. . . . . . . . . . . . . . . . . . . (1) ________
Somewhat familiar to me. . . . . . . . . . . . . . . . . (2) ________
Not at all familiar to me. . . . . . . . . . . . . . . . (3) ________

6. If I were asked to characterize at least four national and/or state career education models, I would find this:

Very easy. . . . . . . . . . . . . . . . . . . . . . (1) ________
Fairly easy. . . . . . . . . . . . . . . . . . . . . (2) ________
Fairly difficult. . . . . . . . . . . . . . . . . . (3) ________
Very difficult. . . . . . . . . . . . . . . . . . . (4) ________

7. Career education means about the same thing as:

Development of vocational and technical skills. . . . (1) ________
Development of career opportunity awareness. . . . . . (2) ________
Development of self-awareness in relation to career choice. . . . . . . . . . . . . . . . . . . . . . (3) ________
Development of all of the above. . . . . . . . . . . . (4) ________
Don't know. . . . . . . . . . . . . . . . . . . . . . (5) ________

8. Career education curriculum development and implementation is:

Very familiar to me. . . . . . . . . . . . . . . . . . (1) ________
Somewhat familiar to me. . . . . . . . . . . . . . . . (2) ________
Not at all familiar to me. . . . . . . . . . . . . . . (3) ________

9. I have first-hand knowledge of

A wide variety of career education materials. . . . . (1) ________
A limited number of career education materials. . . . (2) ________
Virtually no career education materials. . . . . . . . (3) ________

10. Regular classroom teachers should be expected to infuse career education concepts into their curriculum:

Regardless of the subject area or grade level taught. (1) ________
Only if they volunteer to do so. . . . . . . . . . . . (2) ________
Only in particularly appropriate subject areas or grade levels. . . . . . . . . . . . . . . . . . . . . . (3) ________
Don't know. . . . . . . . . . . . . . . . . . . . . . (4) ________

11. The involvement of the community in career education is:

Vital. . . . . . . . . . . . . . . . . . . . . . . . . (1) ________
Important. . . . . . . . . . . . . . . . . . . . . . . (2) ________
Optional. . . . . . . . . . . . . . . . . . . . . . . (3) ________
Unnecessary. . . . . . . . . . . . . . . . . . . . . . (4) ________
Don't know. . . . . . . . . . . . . . . . . . . . . . (5) ________

12. The contribution of the business/labor/industry community to a career education program can best be described as:

Observational opportunities for students and educators (1) __________
Work experience opportunities for students and educators (2) __________
Work-study opportunities for students and educators (3) __________
All of these. . . . . . . . . . . . . . . . . . . . . . (4) __________
None of these. . . . . . . . . . . . . . . . . . . . . (5) __________
Don't know. . . . . . . . . . . . . . . . . . . . . . . (6) __________

13. If I were asked to describe at least 5 strategies for bringing representatives of the community into my school's career education program, I would find this:

Very easy. . . . . . . . . . . . . . . . . . . . . . . (1) __________
Fairly easy. . . . . . . . . . . . . . . . . . . . . . (2) __________
Fairly difficult. . . . . . . . . . . . . . . . . . . (3) __________
Very difficult. . . . . . . . . . . . . . . . . . . . (4) __________

14. I believe my present level of competence for implementing career education is:

Adequate. . . . . . . . . . . . . . . . . . . . . . . . (1) __________
In need of some improvement. . . . . . . . . . . . . . (2) __________
In need of much improvement. . . . . . . . . . . . . . (3) __________

15. What would you most like to learn or accomplish as a result of your participation in the UTK Career Education Workshop?

## CAREER EDUCATION WORKSHOP EVALUATION

Check each statement below which expresses your feelings about the Workshop. In some cases, you may wish to check more than one answer per question.

### FORMAT

(1) Overall, the workshop was:
____ Very worthwhile in terms of answering my immediate needs.
____ A worthwhile experience, though some of my immediate needs were not met.
____ Of limited value.
____ Comments: ______________________________________________
______________________________________________

(2) The amount of time spent on lecture:
____ Was too extensive.
____ Was about right for the material presented.
____ Could better have been spent on other activities.
____ Was inadequate for the kind of materials presented.
____ Comments: ______________________________________________
______________________________________________

(3) Small group meetings:
____ Were not necessary and were not included.
____ Should have been included, but were not.
____ Were effectively incorporated into the workshop.
____ Added nothing to workshop effectiveness and should have been omitted.
____ Comments: ______________________________________________
______________________________________________

(4) Audiovisual presentations:
____ Were not necessary for this workshop and were not used.
____ Were not used, but would have been helpful.
____ Were used with great effectiveness.
____ Were not effectively used as they might have been.
____ Were relied upon too heavily.
____ Comments: ______________________________________________
______________________________________________

(5) Opportunity for discussion:
____ Was adequate and greatly helped the group's understanding of topics presented.
____ Was limited, but adequate for purposes.
____ Was inadequate.
____ Comments: ______________________________________________
______________________________________________

(6) On the whole, this workshop was:
____ The first workshop of this type I've attended.
____ Not as effective as others I've attended.
____ More effective than others I've attended.
____ Similar to others of its type I've attended.
____ Comments: ______________________________________________
______________________________________________

## RESPONSE TO WORKSHOP PRESENTERS

(7) Professors on the workshop team seemed:
____ Thoroughly prepared and competent.
____ Reasonably well prepared.
____ Somewhat prepared.
____ Unprepared.
____ Comments: ________________________________________
________________________________________

(8) Professors on the workshop team were:
____ Highly sensitive to participants' needs.
____ Usually sensitive to participants' needs.
____ Somewhat sensitive.
____ Insensitive.
____ Comments: ________________________________________
________________________________________

(9) Comments and/or instructions given by the professors were:
____ Invariably clear and helpful.
____ Generally clear.
____ Often unclear.
____ Difficult to understand.
____ Comments: ________________________________________
________________________________________

(10) In general, the professors:
____ Discouraged open communication.
____ Did very little to facilitate communication.
____ Occasionally encouraged open communication.
____ Consistently encouraged open communication.
____ Comments: ________________________________________
________________________________________

## PERSONAL RESPONSE TO THE WORKSHOP

(11) Through this workshop I gained:
____ A desire to learn more about topic(s) covered.
____ Knowledge of materials or methods which will be useful to me.
____ Ability to solve problems within my job assignment.
____ Awareness of other resources available to me.
____ Increased insight regarding my own needs.
____ A better general understanding of the topic(s) covered.
____ Comments: ________________________________________
________________________________________

(12) I intend to implement methods or materials introduced in this workshop:
____ Immediately.
____ Within the next year.
____ At some future date, though I can foresee no immediate use for them.
____ Never.
____ Comments: ________________________________________

________________________________________

(13) As a participant, I felt:
____ Very welcome to ask questions or seek additional help at any time.
____ Welcome to ask questions when they were asked for.
____ Somewhat uneasy about asking questions.
____ Comments: ________________________________________

________________________________________

(14) The group (participants) as a whole could be described as:
____ Quite tense, experiencing much difficulty in communications.
____ Occasionally tense, experiencing some hindrance in communications.
____ Fairly open with reasonably good communications.
____ Very open, enjoying excellent rapport.
____ Comments: ________________________________________

________________________________________

(15) During activities/exercises I felt:
____ Very involved--very much a part of the group.
____ Generally involved, though not as much a part of the group as I would have liked.
____ Only superficially involved.
____ Alienated.
____ Comments: ________________________________________

________________________________________

Please CIRCLE your response.

NO 16. Were you adequately informed about the nature and purposes of this workshop before you came?

NO 17. Would you have attended this workshop if you had known what it would be like?

NO 18. Do you feel you could have learned as much about career education on your own as you learned during the workshop?

NO 19. If this workshop is offered again, would you recommend it to a fellow professional?

NO 20. Are you optimistic about the chances that the career education program plans which you have developed will actually be carried out?

21. Was the size of this workshop group

______ too large? ______ about right? ______ too small?

22. Please rate the quality of the curriculum modules with which you had first-hand experience.

| | (4) Excellent | (3) Good | (2) Fair | (1) Poor |
|---|---|---|---|---|
| "Introduction to Career Education" | | | | |
| "The Counselor and Career Education" | | | | |
| "Career Education for the Handicapped" | | | | |
| "Administration of Career Education Programs" | | | | |
| "Infusing Career Education into The School Curriculum" | | | | |
| "Community Resources in the Career Education Program" | | | | |

How would you rate each of the following:

| | (4) Excellent | (3) Good | (2) Fair | (1) Poor |
|---|---|---|---|---|
| 23. The overall quality of the instruction you received during the workshop? | | | | |
| 24. The overall quality of the learning materials you received? | | | | |
| 25. The quality of the equipment and facilities used during the workshop? | | | | |
| 26. The quality of the advance planning and organization of the workshop? | | | | |

27. What workshop topic interested you most?

28. What workshop topic interested you least?

29. What topic(s) should have been included in the workshop program but were not?

# APPENDIX K

# EVALUATION OF MODULE CONTENT BY PARTICIPANTS IN THE KNOXVILLE SUMMER WORKSHOP

## Evaluation of Module Content
## By Participants in the Knoxville Summer Workshop

"Introduction to Career Education"

A total of 30 participants in the Career Education Workshop evaluated the module entitled "Introduction to Career Education." The percentage of participants rating each of various aspects of that module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 60% | 30% | -- |
| B. Instructional Strategies Used by Instructor | 74% | 23% | 3% |
| C. Curriculum Materials Recommended for Helping Me Learn | 77% | 20% | 3% |
| D. Curriculum Materials Recommended for Helping My Students | 67% | 23% | 10% |

Ninety-six percent of the participants indicated that the outside speakers/ consultants helped in their acquiring a better understanding of the module content.

Strengths. The module content areas that the participants rated as especially strong/effective were: the use of materials, speakers, audio-visuals (12 responses); the definitions, explanations, and applications of career education (6); the instructional strategies (3); the historical overview (2); and the presentation of rationale (1).

Weaknesses. Those content areas that were rated as weak/ineffective were: disorganization during the initial meetings--failure to provide an overview relating all sessions to module objectives (5 responses); presentations by a few of the speakers (3); and the lack of relevance to elementary school (2).

Suggestions for Content Additions and Improvement. Some Workshop participants indicated that more emphasis should have been placed on the use of actual career education plans and their infusion into the curriculum (2 responses). Other

## EVALUATION OF MODULE CONTENT

## "Introduction to Career Education"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

______ YES ______ NO ______ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

suggestions for improving this module for future use included: a better overview of all sessions connected with this module (2 responses); a broader coverage of career education in K-12 instead of emphasizing only 10-12 (1); more lectures on the background and introduction of career education (1); viewing of an actual career education situation in operation (1); and more group discussion (1).

"Career Education for the Handicapped"

A total of 24 participants in the Career Education Workshop evaluated the module entitled "Career Education for the Handicapped." The percentage of participants rating each of various aspects of the module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 85% | 15% | -- |
| B. Instructional Strategies Used by Instructor | 73% | 27% | -- |
| C. Curriculum Materials Recommended for Helping Me Learn | 91% | 4.5% | 4.5% |
| D. Curriculum Materials Recommended for Helping My Students | 82% | 9% | 9% |

Fifty-five percent of the Workshop participants indicated that the outside speakers/consultants helped them in acquiring a better understanding of module content.

Strengths. The two outstanding areas of the module, as indicated by the participants, were: the presentations and instructional strategies (10 responses), especially the presentations on laws concerning the handicapped; and the materials and handouts (5), which included the paper on 22 competencies and the concept of career education for the handicapped.

## EVALUATION OF MODULE CONTENT

## "Career Education for the Handicapped"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

______ YES ______ NO ______ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

Weaknesses. The aspects of the module that were seen as ineffective were: the lack of time to complete requirements (1 response); lack of illustrations (1); and disorganized presentations (1).

Suggestions for Content Additions and Improvement. One participant indicated the need for more materials that could be used within the classroom. Another suggested that additional instructional strategies should have been incorporated. Other suggestions included the need for more information (1), and the utilization of more films to emphasize content (1).

"Administration of Career Education Programs"

A total of three participants in the Career Education Workshop evaluated the module entitled "Administration of Career Education Programs." The percentages of participants rating each of the various aspects of the module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 34% | 33% | 33% |
| B. Instructional Strategies Used by Instructor | 34% | 33% | 33% |
| C. Curriculum Materials Recommended for Helping Me Learn | -- | 67% | 33% |
| D. Curriculum Materials Recommended for Helping My Students | -- | 67% | 33% |

Strengths. The Workshop participants indicated that the module contained appropriate learner objectives.

Weaknesses. The participants indicated that the module could have been improved by more input from the instructor with regard to the learner objectives, and by more career education materials relevant to administrators.

## EVALUATION OF MODULE CONTENT

## "Administration of Career Education Programs"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

______ YES ______ NO ______ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

Suggestions for Content Additions and Improvement. One participant indicated that more emphasis was needed regarding the career education plan. Suggestions for improvement relate to the involvement of more administrators in the presentation (1); and the development of a more detailed module design (1).

### "Infusing Career Education into the School Curriculum"

A total of 25 participants in the Career Education Workshop evaluated the module entitled "Infusing Career Education into the School Curriculum." The percentage of participants rating each of various aspects of that module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 79% | 21% | -- |
| B. Instructional Strategies Used by Instructor | 85% | 15% | -- |
| C. Curriculum Materials Recommended for Helping Me Learn | 86% | 14% | -- |
| D. Curriculum Materials Recommended for Helping My Students | 71% | 29% | -- |

Seventy percent of the Workshop participants indicated that the outside speakers/consultants aided in their understanding of the module content.

Strengths. This module's strong points, as indicated by the Workshop participants, were: the instructional objectives, strategies, and materials (9 responses); the instructor's manner of presentation and helpfulness (5); and the plans/ideas for infusing career education into the curriculum (4).

Weaknesses. The participants viewed the module's weak points as: a lack of time to complete the written activities (3); the filmstrips (1); a lack of materials directed toward student use (1); and a delay in explanation regarding lesson-plan production (1).

# EVALUATION OF MODULE CONTENT

## "Infusing Career Education into The School Curriculum"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

   ______ YES ______ NO ______ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

Suggestions for Content Additions and Improvement. One participant indicated that additional emphasis on modules was needed. Suggestions for content improvement relate to the need for: additional materials (1); more time in which to complete the activities (1); more specifics as to the actual infusion process(es) involved in the different subject areas (1); brainstorming sessions (1); a shorter number of weeks necessary for course completion (1).

### "The Counselor and Career Education"

A total of six participants in the Career Education Workshop evaluated the module entitled "The Counselor and Career Education." The percentage of participants rating each of various aspects of that module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 67% | 33% | -- |
| B. Instructional Strategies Used by Instructor | 34% | 33% | 33% |
| C. Curriculum Materials Recommended for Helping Me Learn | 50% | 33% | 17% |
| D. Curriculum Materials Recommended for Helping My Students | 50% | 33% | 17% |

All the Workshop participants indicated the outside speakers/consultants effectively communicated the module content.

Strengths. The module areas that were especially beneficial to the participants were: visits to campus resources (2); class discussions (2); the interactions between instructors and counselors (1); class speakers (1); and the focus on self-awareness (1).

Weaknesses. Aspects of the module that were seen as ineffective by the participants were: demonstrable guidelines for the module (3); a lack of inappropriate needs assessment procedures (1); and premature module evaluation (1).

## EVALUATION OF MODULE CONTENT

## "The Counselor and Career Education"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

_____ YES _____ NO _____ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

Suggestions for Content Additions and Improvement. Some Workshop participants indicated that more emphasis should have been placed on more concrete experiences such as "hands on" activities/experiences and audio-visual materials (2); and group discussions involving viewpoint exchange (1). Suggestions for improving this module for future use include: utilize, as examples, more lesson plans (2); put more preparation into the class presentations (2); and use present procedures for conducting needs assessments and relate the module to these needs (1).

### "Community Resources in the Career Education Program"

A total of thirty participants in the Career Education Workshop evaluated the module entitled "Community Resources in the Career Education Program." The percentage of participants rating each of various aspects of that module as 'very helpful', 'helpful', or 'not helpful' follows:

| | Very Helpful | Helpful | Not Helpful |
|---|---|---|---|
| A. Learner Objectives | 76% | 24% | -- |
| B. Instructional Strategies Used by Instructor | 80% | 20% | -- |
| C. Curriculum Materials Recommended for Helping Me Learn | 70% | 27% | 3% |
| D. Curriculum Materials Recommended for Helping My Students | 73% | 23% | 4% |

Seventy-five percent of the Workshop participants indicated that the outside speakers/consultants helped in their acquiring a better understanding of the module content.

Strengths. The module content areas that the participants rated as strong/effective were: field trips/work-site visits (14 responses); preparation for field trips (3); group and panel discussions (3); a variety of speakers (2); and the instructors' helpful strategies (2).

## EVALUATION OF MODULE CONTENT

## "Community Resources in the Career Education Program"

1. For this curriculum module, how would you rate each of the following:

| | Very Helpful/ Quite Adequate | Helpful/ Adequate | Not Helpful/ Weak |
|---|---|---|---|
| A. learner objectives | | | |
| B. instructional strategies used by instructor | | | |
| C. curriculum materials recommended for helping me learn | | | |
| D. curriculum materials recommended for helping my students | | | |

2. Did the outside speakers/consultants used in connection with this module help you gain a better understanding of module content?

_______ YES _______ NO _______ NO CONSULTANTS UTILIZED

3. What aspect(s) of the module was especially strong/effective?

4. What aspect(s) of the module was especially weak/ineffective?

5. What topic(s) should have been covered, but was not?

6. What, if anything, needs to be done to improve this module and its presentation?

Weaknesses. Those content areas that were rated as ineffective were: preparation for field trips (4); lack of time using DOT (3); relevance of speakers (2); details on implementing community-based programs (1); lack of information concerning counselors' roles (1); field trips were too rushed (1); and "fantasy" attitude toward using field trips with students (1).

Suggestions for Additions and Improvement. Suggestions for additional module coverage included greater depth in both legal liability and workman's compensation (2); a listing of the available Knoxville community resources (2); and methods for involving the community (1). Suggestions for module improvement for future use included: more field trips with more time and attention given to each site (5); and the initiation of a detailed program for teachers/counselors to use with students (2).